FOREIGN AGRICULTURE

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1980

United States Department of Agriculture — Foreign Agricultural Service

Corn harvest in Mexico

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The U.S. Transportation System—Some Reasons for Optimism

We are cautiously optimistic regarding the physical capability of our inland transportation system to meet 1979/80 export demands. There are some serious problems, but the system is breaking records almost weekly. Inspections of grains for export totaled over 118 million bushels for the week ending November 8, 1979. Meeting the challenge of the anticipated increase in export sales this year would involve only a marginal increase over what the system has been doing the last 4 months.

A brief review of transportation system statistics for the decade of the '70's provides the basis for our optimism. Comparisons of grain shipments in 1978 and 1977 reveal the following:

- Inspections for export—up 27 percent
- Barge loadings—up 9 percent
- Rail carloadings up 8.5 percent.

The transportation system will experience stresses in sustaining these high performance levels. As long as transportation companies are able to price their services in a competitive market, however, a period of high demand should produce sufficient revenues to provide incentives to overcome the stresses. Freight rates farmers pay will go up; some of the increase will be attributable to expanded Soviet import needs.

But, just as farmers need the financial incentive to sell their product, transportation companies need the financial incentive to provide their services. Sensitive and effective rail regulatory reform is needed which, while ensuring shipper equity and prevention of monopoly abuses, will promote effective competition, improve carrier financial viability, increase productivity, and reduce costs. A prolonged period of high demand, which portends a long-term change in what should be considered normal export levels, should bring about an expansion in system capacity to accommodate the new level of demand at normal, compensatory prices.

Capacity of the transportation system is a concept not easily defined. A theoretical, economic definition of capacity is that point at which an increase in price does not result in an expansion of output. On this basis, the transportation system, at the national, aggregate level is not at capacity, in our judgment.

This, however, is of little comfort to the small North Dakota country elevator operator who ordered 20 cars last week and got only 2. Traditionally, car shortages tend to show up when average grain export inspections reach 275-300 million bushels per month. In 1979/80 we are going to have to average the excess of 400 million bushels per month—generally the level of activity during July through October 1979.

Car shortages, at least, do indicate demand—demand that would not exist if grain were not selling at a price farmers were willing to accept. Because a substantial portion of the increase in export volume originates on branch-lines, some previously marginal lines that may have been slated for abandonment may get a new lease on economic life. To the extent that increased export demand may ease the pressure for line abandonments, some farmers will benefit.

There is a tendency to view the "export transportation system" as something separate from our domestic "food delivery system." They are, in fact, the same thing and are therefore subject to the same problems. Domestic food processors must compete with export sellers for available transportation services. We fully expect they will be successful with a minimal impact on food prices or supplies.

The system is currently operating under several constraints:

- Locks and Dam 26 on the Mississippi River is at effective capacity. Barge delays are currently running 1-2 days.
- Two significant grain carriers are in bankruptcy—the Rock Island and the Milwaukee. Midwest agriculture has a definite interest in expediting the reorganization of these railroads.
- We have a problem with deterioration of rural roads and particularly bridges. Comprehensive State planning and financing are the challenges here.
- Public and private decision-makers have a need for reliable information on the short, intermediate, and long-term essential transportation needs of agriculture. The objective is to have the capacity, for example, to take export projections and interpret the transportation consequences.

A directive to the USDA to determine the essential transportation needs of agriculture on a continuing basis will be one of the major recommendations of the Rural Transportation Advisory Task Force.

In addition to this recommendation, the Task Force will be making several recommendations on major issues affecting agricultural transportation in its final report (submitted January 1, 1980). There will be a recommendation on a national agricultural policy. There will be specific recommendations on how to remove obstacles to improve efficiency—

Statement by Ron Schrader, Director, Office of Transportation, USDA, before subcommittees of the Senate Committee on Agriculture, Nutrition, and Forestry.

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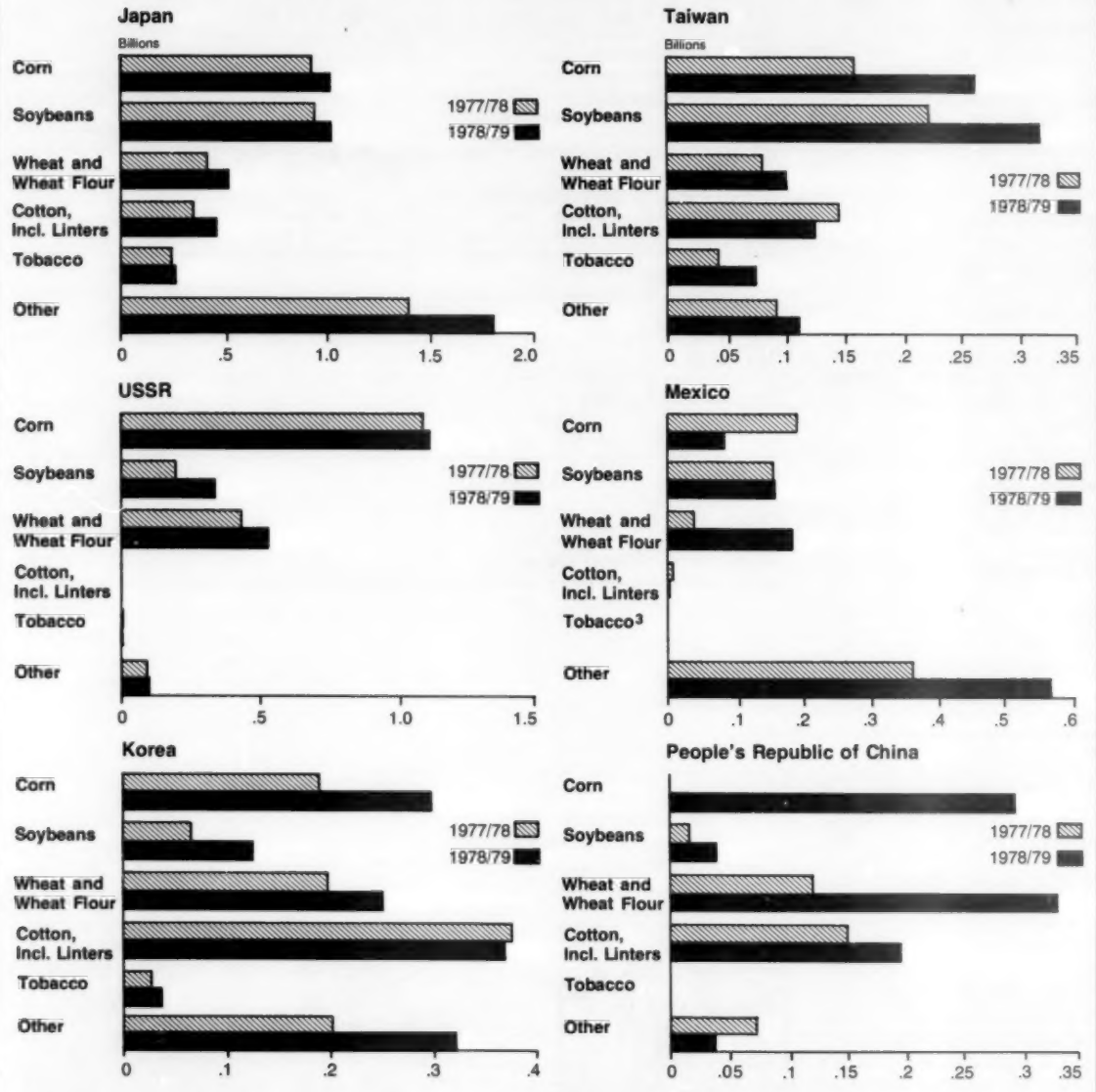
AGRI-DATA

Major Markets for U.S. Agricultural Exports— Fiscal 1977/78, 1978/79— With Major Commodities[1] (Billions of Dollars[2]).



[1]Not adjusted for transshipments.

[2]Base scale varies by country.

[3]Less than $100,000 both years.

COMMODITY UPDATE

WORLD COTTON PRODUCTION IN 1979/80 IS ESTIMATED AT 64.2 MILLION BALES, well above the 59.8 million produced in 1978/79. Foreign production may increase 750,000 bales to 49.7 million bales, as estimates for USSR and Egypt have been raised. U.S. production is estimated at 14.5 million bales, 34 percent greater than the 10.9 million harvested last season.

The Soviet Union has announced that deliveries of seed cotton have reached a record 9.1 million metric tons, equal to 13.0 million bales of lint cotton. The warm, long fall allowed lint cotton to continue to grow later than the average frost date of mid-October. Egypt has had record yields for the second straight year. Slight reductions have been made in the estimates for Greece, Syria, and Brazil.

World consumption in 1979/80 is forecast at 63.5 million bales, 700,000 above the 1978/79 level. Demand remains fairly strong in the United States, as well as in many foreign countries. However, lower economic growth rates are expected to slow cotton use in 1980.

The official USDA export estimate for 1979/80 is 7.0 million bales, compared with shipments of 6.2 million in 1978/79. This heavy movement is expected to strain U.S. transportation and warehouse facilities.

Cotton prices have shown gradual upward movement in the past month, chiefly because of the strong demand from the PRC and the absence of Soviets quotations in Western Europe. The Northern Europe "A" c.i.f. index price averaged 81.5 cents per pound in early December, compared with the December 1978 price of 79.08 cents.

U.S. FISCAL 1979 EXPORTS OF DAIRY, LIVESTOCK, AND POULTRY PRODUCTS increased 42 percent in value over 1978's level to almost $3.4 billion.

Major export items in terms of value, with percentage increases in parentheses, during the year were: Hides and skins, $970 million (61); tallow and grease, $649 million (26); poultry and egg products, $368 million (11); furskins, $332 million (51); pork, $242 million (15); beef, $236 million (33); and variety meats, $232 million (26).

THE DECEMBER WORLD OILSEED FORECAST FOR 1979/80 IS 178.1 MILLION METRIC TONS, virtually unchanged from November's forecast, and 40 percent above the 158.9-million-ton output for 1978/79.

World soybean production is projected at 95.2 million tons, up 18 percent from year-earlier levels. Moderate increases in acreage and relatively good weather conditions are primarily responsible for the rise.

The U.S. soybean crop is forecast at a record 60.85 million tons, up 20 percent from the 1978/79 total. The increase in U.S. soybean production accounts for half of the gain in world oilseed production.

Unfavorable weather conditions in the Soviet Union have reduced USSR sunflowerseed production. However, a dramatic increase in U.S. sunflowerseed production has more than offset the Soviet decline, resulting in a 20 percent increase in world sunflowerseed production.

IN RECENT WEEKS, THE DECEMBER ESTIMATE OF 1979 WORLD GRAIN PRODUCTION has remained unchanged. The current estimate, including milled rice, is 1,388 million tons, 4 percent less than 1978's record outturn.

The estimate of world utilization has increased only slightly, primarily as a result of an upward revision in Soviet consumption. Total utilization is expected to increase less than 1 percent in 1979/80 from the

previous year's level, compared with a 6 percent increase between 1977/78 and 1978/79. This deceleration may reflect a lower rate of interest in feed use, owing to a slowing in pork and poultry expansion in the United States and Western Europe, smaller feed supplies in some areas, larger supplies of high protein meal, and the downturn in economic activity in some countries. World trade is currently estimated at a record 193 million tons, marginally higher than last month's estimate. This projected record results from the dramatic surge in USSR imports—more than double the 1978/79 (July/June) level. Aggregate marketing-year ending stocks, estimated at 196 million tons or 13.8 percent of annual world utilization, are unchanged from the month-earlier level.

The recently announced official Soviet crop outturn of 179 million tons compares with USDA's previous estimate of 175 million tons. This increase, however, is generally balanced by a 4.5 million ton reduction in the Asian crop, particularly in India. Rainfall deficiencies in parts of Thailand and Indonesia also have resulted in deteriorating rice crop prospects. Recent heavy rains and frosts in Brazil and Argentina have reduced wheat crop prospects, although corn crop prospects in these countries appear good. Planting conditions for coarse grains in South Africa also are favorable.

WORLD TOBACCO CROP WAS 3 PERCENT SMALLER IN 1979 THAN IN 1978. North American output fell 19 percent because of disease and weather damage to the U.S., Canadian, and Cuban crops.

The U.S. crop fell to the lowest level since 1943 as a combination of smaller planted area, the most extensive outbreak of field blue-mold ever recorded, and an extremely wet growing season all adversely affected the size of the crop.

The Canadian crop also suffered extensive blue-mold damage and was off by almost a third. Asian leaf output fell because of reduced crop size in Japan, South Korea, India, and Turkey.

South America production, however, rose 18 percent as most countries harvested larger crops. Brazil's output rose 21 percent, primarily because of an increased production of cigarette-type tobaccos in southern Brazil.

U.S. FLUE-CURED TOBACCO BASIC MARKETING QUOTA FOR 1980 HAS BEEN SET at 1,095 million pounds, the same as that for the 1979 crop. The national area allotment will be 590,615 acres.

Undermarketings from the 1979 crop are expected to exceed over marketings by 85 million pounds, making the 1980 effective quota about 1,180 million pounds, 115 million pounds above the 1979 effective quota.

Estimated marketings from the 1980 quota are expected to be 1,120 million pounds, 143 million pounds more than 1979 crop marketings.

The national marketing quota is based on estimated domestic use and exports of flue-cured tobacco during the marketing year from July 1, 1980, through June 30, 1981, with a possible adjustment to maintain supplies, including reserves, at desired levels.

WORLD PRODUCTION OF DRIED FRUITS HAS RECOVERED IN 1979 and is expected to register a marked improvement over last season's.

Raisin output—led by a near record U.S. crop of 281,200 tons—is estimated at 653,100 metric tons, an increase of nearly a third over 1978's reduced supplies. Prune production probably will show a slight improvement over that of 1978. Estimates place the 1979 outturn at 178,500 tons, compared with 171,000 tons a year earlier. Fig output is anticipated to amount to 98,800 tons, 7-8 percent above the reduced 1978 crop. Production in Turkey is estimated at 52,000 tons.

Currant production, at 63,200 tons, is well below 1978's 71,600-ton level and nearly 12 percent below the previous 5-year average. Dried apricot output is estimated at 26,400 tons, compared with only 20,200 last season.

OUTLOOK '80

Farm Exports a Focal Point of USDA's 56th Annual Outlook Conference

Last year's concerns over inflation, rising energy costs, adequate transportation, and maintaining farm income will be very much with U.S. agricultural interests during 1980. But farmers also will be able to point to solid achievements in exports of farm products—exports that are forecast to hit a record $38 billion in fiscal 1980 and boost the agricultural trade surplus to a new high of about $20 billion.

U.S. farm trade, in short, continues as the bright spot in a time of uncertainty, as graphically described by speakers at the U.S. Department of Agriculture's 56th Annual Outlook Conference, held in Washington, D.C., November 5-8, 1979.

Pointing up the importance of farm trade in an increasingly interdependent world, "Outlook '80" took as its theme "Agriculture in a World Setting." Topics covered ranged from family nutrition and budgeting in a time of rapid inflation to transportation constraints facing U.S. agriculture, rising costs, and the outlook for world agricultural production and trade.

In a welcoming address, James H. Williams, Deputy Secretary of Agriculture, called agriculture a "vital steppingstone in a chain of intercommunication, intercooperation, and interdependence . . ."

Steady growth in world agricultural production during the past decade has helped preserve this quality of life, said Williams, and underpinned some phenomenal advances in world consumption and trade. To wit—

- Increases since 1970 of 30 percent in world grain consumption and 60 percent in oilseed use;
- Gains of 81 percent in world grain trade since 1969/70, 83 percent in world oilseed trade, and 125 percent in cotton trade;
- A tripling of the volume of U.S. exports of grains and oilseeds during the 1970's, and a quintupling of the value of all U.S. agricultural exports, which in fiscal 1979 hit $32 billion—their ninth consecutive record.

Farmers and consumers today, however, face some formidable challenges that could tax the agricultural production system and perhaps eventually lead to a slowing of world demand for farm products.

This article and others in the magazine do not reflect the changes in farm exports likely to derive from President Carter's January 4 announcement of a sharp cutback in 1979/80 grain shipments to the USSR. Authorized grain exports to that country have been reduced to 8 million tons from the 25 million originally set.

Inflation has become a focal point of concern, both for the farmer and consumer.

U.S. farmers, for instance, are being hard hit by rising input costs. As a result, net farm income in the 1980's may decline to the mid $20-billion range from the record $30-$32 billion estimated for 1979, according to J. Dawson Ahalt, Chairman of USDA's World Food and Agricultural Outlook and Situation Board.

In his keynote address to the conference, Ahalt also indicated that the recent slowing of growth in world grain production—from 3.2 percent a year in the 1960's to 2.9 percent in the 1970's—will continue into the 1980's. Lagging productivity has been a factor behind this slowdown, which could be joined by slackened growth in demand during the 1980's if recession and balance-of-payments problems erode importers' purchasing power.

Other forecasts by Ahalt:

- A 4.5 percent decline in world grain production during 1979/80 for "the largest year-to-year drop on record" but without the sharp price gains and consumption declines that followed production shortfalls in the recent past. On the contrary, said Ahalt, "we anticipate no cutback in global grain use in 1979/80—in fact we

James H. Williams, Deputy Secretary, USDA

"Agriculture is a primary and vital steppingstone in a chain of intercommunication, intercooperation, and interdependence . . ."

will probably see a modest increase, with world grain prices rising only slightly." Record world grain stocks of 226 million tons following a bumper 1978/79 crop account for the difference, together with a U.S. grain reserve system that allows stocks to be released directly into the marketplace in times of rising prices.

- Unusually large supplies of oilseeds—resulting from a 3.2 percent increase in world production this year—that will depress prices for oil and meal and help hold down grain prices as well.
- Increases in U.S. plantings of corn this year and decreases in those of soybeans in response to the 1979/80 supply situations for the products;
- A 4-million-bale increase in world cotton production during 1979/80 (Sept.-Aug.) and a record world cotton consumption;
- Stagnant U.S. beef production in 1980, following a 12 percent decline last year, and a cost-price squeeze on pork and poultry producers that could lead to reduced supplies by late 1980; this contrasts with superabundance of the two commodities in 1979.

Howard W. Hjort—USDA Director of Economics, Policy Analysis, and Budget—discussed agricultural policy issues that will arise during the 1980's. He sees the early 1980's as being a time of slow—but gradually rising—

Outlook '80—
Views by Commodity Experts

Grain

The world wheat crop for 1979/80 is forecast at 401 million tons, 9 percent below last year's record harvest, with production outside the United States expected to be down 12 percent. U.S. production in 1978/79 of 57.5 million tons was up 18 percent from the 1977/78 level.

World wheat trade is forecast at a record 79 million tons, up a tenth from the 1978/79 level, and U.S. exports—forecast at 1.4 billion bushels for 1979/80—will likely account for three-fourths of the expected increase in trade volume. The U.S. share of world trade may increase to 48 percent, compared with 45 percent in 1978/79 and 43 percent in 1977/78. With no acreage restrictions in effect for the 1979/80 year and wheat prices up a third from the year-earlier level, planted area could be about a tenth larger than in 1978/79.—***Paul J. Meyers, World Food and Agricultural Outlook and Situation Board.***

U.S. feedgrain exports will likely rise about 18 percent this year to around 71 million tons, chiefly as a result of the large Soviet import demand, but also because of strong import demand worldwide and no expansion in exports by other suppliers. Total world feedgrain trade is forecast to increase 11 million tons in 1979/80, or 12 percent. Total shipments by other exporters may not rise and could possibly decrease slightly, which implies that U.S. exports on a July-June basis could expand by more than the increase in world trade and the U.S. share of world trade could rise to 70 percent from 64 percent last year.—***James P. Rudbeck, FAS.***

U.S. farmers should be in a favored position this year as the number of feedgrain exporters in the world is shrinking and the number of importers is growing. It is expected that the world will become increasingly dependent upon the United States to supply feed and food. However, since U.S. farmers will likely never be able to produce enough to solve the world's food problems, individual countries must improve their agricultural productivity to fill this gap.—***Maurice P. Brannon, Cargill.***

The Canadian export target for grains is to put 20 percent more through the system in 1979/80 than last season. Export clearances totaled 19 million tons last year, largely because of severe capacity constraints and some difficult operating conditions, but should exceed 22 million tons this season. Canada expects to export 14.5 million tons of wheat this season.—***W. M. Miner; Department of Industry, Trade, and Commerce; Canada.***

Argentina is looking forward to a 7.8-million-ton wheat harvest (3.8 percent less than last year), which added to a carryover of approximately 1 million tons—practically the same as last year's. Argentine exports may reach 3.6 million tons, of which 2 million tons already have been committed for shipment in the first quarter of 1980.—***Diego White, National Grain Board, Argentina.***

economic growth; relatively rapid inflation that may, however, slow from the 1979 rate; and higher unemployment. He also sees continued imbalances in the U.S. trade account, despite increases in value of U.S. farm exports. "The dollar may have to decline further relative to other currencies during 1980-82 to bring about a positive balance on our goods and services account and to reduce the large deficit on our trade account," he said.

Hjort drew parallels between conditions now facing the world and those of the mid-1970's, when recession coincided with rapid price gains in food and petroleum to suppress growth in grain consumption. He added, however, that "conditions during the early 1980's should not be as adverse to gains in consumption as they were from the early to the mid-1970's."

Moreover, he said, "the world agricultural sector will have to operate close to capacity through the early 1980's and at capacity for most of the decade." For the United States, this means an agricultural plant running at capacity or near capacity, strong demand for production inputs—especially fertilizers, fuels, and machinery; continued strain on U.S. storage, transportation, and port facilities; and—in years of adverse weather—possible price instability.

J. Dawson Ahalt, Chairman, World Food and Agricultural Outlook and Situation Board, USDA

"... the global economic picture indicates the demand for food will expand in the year ahead—at a pace less than that of the past 2 years but more rapid than the 1974/75 period."

Oilseeds

From the look of things now, 1979/80 will be another barnbuster in terms of supply increases for meal as well as oil. Past trends are becoming less reliable as predictors of production and trade, with both production and exports substantially exceeding the projected linear trends. Furthermore, exports have up until this season accounted for a somewhat larger share of world output. The countries accounting for most of the consumption gains are not the same countries that are producing those gains—indicating a growing requirement for international transportation facilities. Because of potential delays in shipments, it also means that more storage and handling facilities may be needed in some of the importing countries to maintain a smooth and uninterrupted flow of products to consumers. Whether or not the forecast gains in 1980 world trade for oilseeds and products can be achieved will depend in part on the adequacy and operational efficiency of the transportation system.—***Alan Holz, FAS.***

Livestock and Poultry

World production of red meats and poultry will be large again in 1979 as increases in pork and poultry more than offset declines in beef and veal. Even though world expansion in pork and poultry is expected to moderate in 1980, increased output will more than offset slightly lower beef and veal production, and total meat output will once again increase. Real economic growth in many countries, including the United States, is expected to slow in 1980, which could dampen demand for meat in some countries.—***James E. Nix, World Food and Agricultural Outlook and Situation Board.***

Dairy Products

World dairy production in 1980 will continue to exceed use, and surpluses of milk and products will persist. World milk production in 1979 of 403.7 million tons is expected to be up about 0.6 percent from the year-earlier level. In the United States, the year probably will see higher milk output and steady commercial use. Prices will again be higher in 1980 but likely will be mostly offset by increased cost for feed and other inputs.—***Charles N. Shaw, ESCS.***

Sugar and Tropical Products

World sugar production in 1979/80 may be off 4 percent from the previous year's level to about 87.7 million tons, while consumption is expected to rise 2 percent. The projected 3.3-million-ton deficit will result in the first drawdown in world sugar stocks since 1971/72. World prices for sugar during 1980 are expected to remain strong and will average well above those in the first half of 1979 and the previous 3 years. World sugar imports may be up 1-2 million tons in 1979/80. Much of this gain is expected to take place in the Soviet Union and China.

Coffee production in 1979/80 (Oct.-Sept.) will be up 4 percent from the previous year's level. However, yearend stocks in producing countries are projected to be off 3 percent as demand increases from the 1978/79 level. As a result, coffee prices (both green and roasted) are expected to remain at relatively high levels through 1980.—***Robert M. McConnell, FAS.***

Cotton

World cotton production is projected by FAS to increase in 1979/80 to 64.2 million 480-lb. bales, 7 percent above the previous year's level. World consumption in 1979/80 is forecast at 63.5 million bales, up slightly from 1978/79's 62.8 million bales, while exports approach 20 million bales compared with 19.5 million in 1978/79. Continued strong world demand, plus an apparent decline in China's cotton production, are the main reasons for the increase. Cotton consumption and imports in the textile producing countries are generally expected to expand.—***Samuel Evans, ESCS.***

Tobacco

The value of U.S. exports of tobacco and products in calendar 1979 is estimated to be up a tenth from 1978's record high to around $2.3 billion. Value of unmanufactured tobacco exports may match last year's record, but tobacco products are expected to surge above last year's high level because of the continued boom in cigarette exports. Total U.S. tobacco exports will register a $1.8 billion surplus over tobacco imports of $500 million.—***Robert H. Miller, ESCS.***

Thomas R. Saylor, Associate Administrator, Foreign Agricultural Service, USDA

"We project exports to increase by almost 20 percent in value this fiscal year to about $38 billion and about 16 percent in volume."

Thomas R. Saylor, Associate Administrator, Foreign Agricultural Service, said that the $38 billion seen for U.S. farm exports this year will represent a 20 percent increase in value from the fiscal 1979 showing, while volume may gain about 16 percent. Shipments of wheat, feedgrains, and soybeans alone could reach 130 million tons, compared with 112 million in fiscal 1979.

Agricultural imports, he said, will grow at a slower rate than exports, reaching a projected $17.5 billion. Consequently, the agricultural trade surplus could surpass $20 billion, compared with $15.8 billion in fiscal 1979. The need to maximize gains here is obvious, said Saylor, given the total U.S. trade deficit of $23 billion in fiscal 1979.

Continued growth in world demand is contributing to the buoyant outlook for U.S. farm exports, with special situations—such as the 1979 Soviet grain shortfall—accelerating gains.

The USSR is expected to seek imports of 34 million tons of wheat and feedgrains; 8 million tons of that total could come from the United States during October-September 1979/80 under terms of the U.S.-USSR grain agreement, now in its fourth year. Such U.S. exports totaled 15.7 million tons in 1978/79.

"... the world agricultural sector will have to operate close to capacity through the early 1980's and at capacity for most of the decade."

Howard W. Hjort, Director of Economics, Policy Analysis, and Budget, USDA

(China was a surprisingly large market last year, taking 6 million tons of grain from the United States. But it may cut back some this year in view of its record 1979/80 grain harvest.)

Traditional markets in Western Europe, Japan, and other developed countries still figure importantly in the U.S. export picture. However, the developing and centrally planned nations are the fastest growing markets and will account for most of the U.S. agricultural export expansion in fiscal 1980. Saylor noted that developed countries' share of U.S. agricultural exports already has slipped to 50 percent from two-thirds a decade ago.

Saylor also cautioned against overenthusiasm regarding U.S. trade in 1980. "There are more uncertainties besides weather in this year's agricultural export outlook than perhaps at any time since these forecasts were started," he said. Among the unknowns:

- The relationship of the dollar to other currencies—appreciation of the dollar could result in a loss of the competitive advantage gained during the dollar's slide of the past few years;
- The impact of inflation on commodity prices;
- The deteriorating world economic situation;
- Further changes in energy supply and prices; and
- The ability of the U.S. transportation system to handle this year's increased export volume.

Addressing the latter issue, Saylor said that "expansion in world trade has put a severe strain on facilities to handle and transport the export volumes required to fill world demand, and demand has outstripped the distribution capabilities in some countries."

This has been especially true in competing countries such as Canada and Australia, but the United States, too, has encountered its share of transportation problems. These were aggravated by temporary shutdowns last year at the Duluth-Superior ports and on the Rock Island Line, inadequate investment in rail facilities, and barge backups at Lock and Dam 26 on the Mississippi River.

Another factor that will begin to influence trade—and continue to do so, during the 1980's—is the effect of the Multilateral Trade Negotiations (MTN) concluded last spring. Concessions won under the MTN began going into effect January 1, 1980, and will bring about liberalization of trade in a number of farm products—ranging from citrus to beef.

Also due to be implemented are codes negotiated to control the use of nontariff barriers to trade, which Saylor sees as possibly having the greatest impact of all concessions received under the MTN. The codes that apply to export subsidies, for instance, could reduce unfair competition for U.S. farm products from subsidized exports by other nations.

Turner L. Oyloe, then Assistant Administrator for Commodity Programs, FAS, contrasted developments during the past decade with prospects for the future.

Based on developments of the past decade, Oyloe projects that U.S. exports of grains and soybeans will rise by 85 million tons between 1980 and 1990, with gains of 43 million tons in feedgrains, 24 million in wheat, and 18 million in soybeans.

Projected growth in yields could provide roughly 27 million tons of grains and soybeans from area now in production, with added production coming from area expansion—some 10 million more acres of feedgrains, 20 million of wheat, and 16 million of soybeans. This increase of about 46 million acres "would be about equal to the expansion in harvested acreage which took place from 1971 to 1980," said Oyloe.

"While there certainly is substantial acreage available in the United States for this type of expansion, there could be some concern regarding the cost of bringing further acreage into production," he continued. "Undoubtedly expansion in our production capability would require significant expenditures of investment capital at the farm level."

Restraints on transportation and energy could further limit U.S. expansion capability, making it increasingly important to utilize the most fuel-efficient forms of transportation. "On a fuel efficient basis," said Oyloe, "rail transport is about half as efficient as barges, and trucks are about one-third as efficient as rail."

He concluded, however, that barring unforeseen developments "the U.S. crop production base given the proper incentives should be able to meet the anticipated increase in the export demand." □

India Moves To Compensate For 1979/80 Grain Shortfall

By Daniel Berman

Prolonged drought and consequent reductions in India's foodgrain production once again have prompted belt-tightening in this populous nation, following 4 years of relative abundance.

But while foodgrain supplies are critically low in some drought-affected areas, the population as a whole does not yet face the food crises once precipitated by crop shortfalls. Stocks accumulated from record harvests of the past are ample, and the Government is stepping up grain distribution and emergency relief efforts. The challenge now is to surmount logistical and energy-shortage problems hindering movement of grain from surplus to deficit areas.

The country at some point could decide to import grain, although Indian Government sources so far are ruling out that possibility. Whether India can stay out of the import market indefinitely hinges in large part on the rate at which public stocks are drawn down, results of the spring (rabi) harvest of wheat, and Government commitment to maintaining a large grain reserve.

As of mid-December, it looked as if foodgrain output in India during 1979/80 (April-March) would fall below 120 million tons, versus the record 128 million produced in 1978/79. (And below 112 million when India's crop year of July-June is used—see the November issue of *Foreign Agriculture*).

Estimates for rice, coarse grains, and other fall-harvested (kharif) crops had been successively lowered as dry weather continued its tenacious grip on the countryside. For rice, the December estimate was 41 million tons (milled), compared with a record 53.6 million produced in 1978/79, reflecting sharp reductions in both area and yields. Coarse grains are estimated to be down 15 percent from last year's level to 25.4 million tons. Some of the most severely affected states include Andhra Pradesh and Rajasthan for coarse grains and Madhya Pradesh, Uttar Pradesh, and Orissa for rice.

The rabi crop of wheat to be harvesied this March-May also has been affected by dry weather and the resulting lack of adequate subsoil moisture. Any delays in planting—which normally begins in November—ultimately will be reflected in lower yields.

Thus, wheat production in 1980 most certainly will fall below both the record 35 million tons harvested in 1979 and the Government's target of 40 million.

India is, however, in a far better position than it has been in previous years of severe drought. This relative improvement derives from the striking production advances achieved during the past 4 years, largely as a result of increased inputs—fertilizer, pesticides, seeds, extension services, and, most importantly, irrigation. An estimated 62 percent of India's wheat and 38 percent of the rice area is now irrigated.

These advances have resulted in some of the world's highest rice yields in certain areas of the State of Punjab and laid the basis for an impressive buildup of stocks. As of early November 1979, stocks held by the Food Corporation of India (FCI) totaled 18 million tons, including 10 million of wheat and 8 million of rice. In fact, total stocks were close to storage capacity during most of the past year, and supplies in some areas exceeded warehouse capacity.

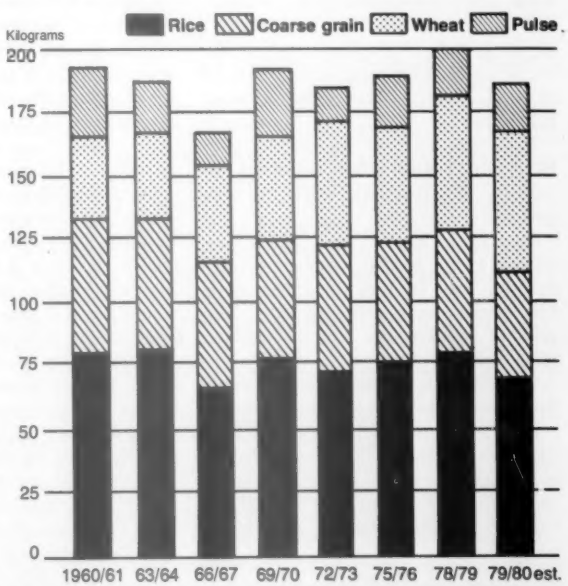
Now stocks are being drawn down to compensate for this season's small crop—a process that is seen lowering reserves some 7 million tons during the next 6-8 months.

Increased quantities of these stocks—and Government-procured grain from new crops—will be moving to the 250,000 fair price shops through which Government-owned grain traditionally has been sold at fixed prices. Given equal prices, consumers generally prefer the quality and choice offered by the free market. However, there are indications that demand for "ration shop" grain is picking up as market prices begin to climb.

Another outlet of increased importance is the Government's Food-for-Work program, which provides employment on various development projects for landless laborers, with payment in the form of grain. A key goal of this scheme is to discourage migration into urban areas, which generally accelerates during times of rural food shortages. Initially, 2.5 million tons of foodgrain were allocated for the program during 1979/80, but the level reportedly has since been doubled.

Grain consumption, meanwhile, continues to rise. In this country of some 650 million people, production must increase by nearly 2.5 million tons per year just to maintain minimal consumption. And still grain comprises about three-fourth of the 2,000 calories in the daily diet. □

India's Grain Consumption per Capita by Type (in Kilograms)



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Trade Prospects Bright For U.S. Exhibitors At Health Food Shows In London, Paris

Health food and product shows, sponsored by FAS in the United Kingdom and France in October, demonstrated to participants the long- and short-term advantages of promoting their foods at such overseas events. The exhibits also reemphasized the need for food exporters to specifically tailor their products to meet the tastes of potential overseas consumers and to meet the health and labeling regulations of governments in target countries. (See article at right.)

Not only were promising contacts with agents and importers made at the London show, October 24-25, and at Paris, October 27-29, but participants also reported contracts were signed at Paris and London that resulted from contacts made at similar events in Zurich and Stockholm in 1978.

At the London show, Britannica Products, a U.K. agent for a U.S. firm, signed a Netherlands distributor, the result of a contact made at the 1978 show in the Swedish capital. In Paris, Sid Alpers, of Sidalper Sales Co., Oradell, N.J., finalized a sizable sale based on preliminary discussions held at the Zurich show, also a year previous.

U.S. exhibitor reaction to the 1979 Paris and London shows reflected the general satisfaction with current results:

• Louis J. Buren, Jr., Operations Manager for BIMA Industries, Inc., Seattle, said in London: "This is a fabulously successful show." Expecting to find the French traders more reticent, Buren said in Paris: "I can't believe it, but we're getting even better response here than in London."

• Jamie Sharp, Sales Manager for Chevron Foods, the British distributor for the Vitality Pure Juice System, said in London: "I am pleased. The show for us was better than we thought (it would be)."

• Dr. Earl G. Alexander, Vice President for Corporate Development, Arrowhead Mills, Inc., Hereford, Tex., said: "We have found widespread interest in manufacturers large and small. We expect to do much business (as a result of the shows) in bulk sales for repackaging. There is considerable interest in mixes sold in bulk."

Immediate sales at the shows were excellent, although the participants are reluctant to comment in great detail about their sales success. It is estimated, however, that sales were well in excess of $200,000 in London and considerably larger in Paris.

Reported sales contacts in Paris could result in shipments of three containers a week of Florida winter strawberries to Jidda, Cairo, and Kuwait City for the 4-month season, Christmas through Easter, and for three containers of avocadoes a week to the Netherlands for August-January. The potential value of these sales is around $324,000.

In general, however, the main thrust of the exhibits was to establish a basis for future sales and to find agents to handle the U.S. products in the United Kingdom and France. Success was reported in both areas.

Approximately 500 tradespeople attended the U.K. show and 700-800 the Paris show. Many of the visitors also attended early-morning briefings on the U.S. health food industry by Ron Weiner, Executive Secretary, National Nutritional Foods Association of the United States. During the question period that followed, particular interest was indicated in ways to assess the differences between U.S. and U.K. and French labeling requirements, how to harmonize U.S. quality control standards with those of the two countries, and the workings of U.S. channels of distribution.

Officials of the British, European, and French health food industries spent considerable time at individual exhibits in search of new-to-market products, finding several hundred scattered among the 41 exhibitors.

Continued on page 14

Clockwise from top: Exhibit booths at USDA Health Food and Product Exhibit in London, October 24 and 25. Health food manufacturers association officials who attended the London show included (l. to r.), Franz Rivetti, of the European Association; Wolfgang Reinsch, of the German Association; Neville Kirby, of the European group; Maurice Hanssen, of the British Association; and Ron Weiner, of the National Nutritional Foods Association of the U.S. At the Paris show, October 27-29 (and at the London event), a health food buffet was available to sample the displayed items. U.S. Ambassador to France Arthur A. Hartman and Guy R. Henry, representative of Celestial Seasons, Inc., of Boulder, Colo., discuss the company's products.

Notes on U.K., French Health Food Markets

Interviews in London with Maurice Hanssen, President of the European Federation of Associations of Health Food Manufacturers, and in Paris with Jean Claude Brun, President of the National Federation of Dietetic Foods (dietetiques), revealed some aspects of the health food markets in the United Kingdom and France of concern to U.S. exporters.

In the United Kingdom:

- All health food advertising must comply with the code of the Health Food Manufacturers' Association, and must be written in such a way that advertisements cannot be misinterpreted. Other parts of the code set regulations to deal with the use of certain words or phrases, instructions for use, and descriptions of benefits.

(A copy of the code probably can be obtained by writing to the H.F.M.A. Code of Advertising Practices Committee, 21 Milbourne Lane, Esher, Surrey, U.K.)

- Labels on U.S. health foods may have to be redesigned, since nearly all such items in the United Kingdom must have ingredients listed in a label panel in letters of a stated size, depending on package dimensions.

(FAS sponsors a label clearance service whereby for $5 per label per country, the U.S. agricultural representative in a target country will obtain an opinion as to the eligibility of a product entering the country as labeled.)

- Any product detailing a curative claim must be licensed by the Government under the Medicine Act of 1968.
- Particular attention must be paid to the tastes of U.K. consumers. For example, the British are partial to a type of lemon flavoring different from that familiar in the United States. As a result, sales in the United Kingdom of a lemon-flavored U.S. dietary product never got off the ground because this difference was overlooked.
- The pricing structure for health foods in the United Kingdom is based on discounts rather than on markups.
- Profits taken from health food sales in the United Kingdom are considerably greater than in the United States, a factor to keep in mind during price negotiations.
- Unique products have a definite selling edge over those similar to ones already on the U.K. market, and give the U.S. supplier a strong bargaining tool.
- Some terms in common use in both the United States and the United Kingdom have different definitions, and the supplier should be aware of these differences. For example, a British pint contains 20 fluid ounces, a U.S. pint only 16.
- Biscuit mix is called scone mix in the United Kingdom.

In France:

- Any product containing the word "health" in its name or advertising must be sold in a pharmacy.
- Vitamins are sold only in drug outlets.
- What are called health foods in the United States are dietetic (dietetique) foods in France, and can be sold in the equivalent of a health food store, although it will not be called by such a name.
- No medical claims may be made for any dietetique food.

Getting ready at the London Health Food Show (clockwise from top): Representatives of Bima Industries (Seattle, Wash.) set up exhibit booth; "Have your products arrived?" asks Billie Tovell, Exhibit Manager (plaid jacket), of Hansen Foods officials; and Arrowhead Mills workers unpack samples of grain and oilseed products for display.

Continued from page 12

Thirty-four of these firms were companies that never before had exhibited in the United Kingdom or France, six were U.K. agents, and one a USDA cooperator—the U.S. Dry Pea and Lentil Council.

On hand in Paris were Government officials involved in food-shipment clearances from the Ministries of Health and Agriculture, representatives of area hospitals and health spas all over France, major supermarket buying agents, and independent store owners.

Products at the FAS shows included a wide variety of foods in a variety of package types, as well as in a range of preparation modes—canned, packaged, fresh, frozen, and dried. Fruits, nuts, and vegetables were particularly well represented, as well as mixes such as combinations of California raisins, dates, coconut, and nuts.

U.S. Ambassadors in both London and Paris visited all of the exhibitors' booths. In London, Ambassador to the United Kingdom Brewster was accompanied by U.S. Agricultural Counselor William R. Rodman, and in Paris, Ambassador to France Arthur H. Hartman, visited the exhibits with U.S. Agricultural Counselor Wayne W. Sharp. □

• No claim can be made that a dietetique food will improve health in general, although claims can be made about specific benefits, if verifiable.

• The French use a markup system.

There also are many regulations that are similar or identical in both the United Kingdom and France, and U.S. exporters should be aware of them.

Hanssen noted there are in Britain about 750 specialized food stores, and about 1,250 other outlets doing health food business worth about $170 million per year. A number of U.S. firms have made significant inroads in the British market in the last few years, and British health food exports to the United States also have increased. "There is certainly a market in the United Kingdom for products that taste good, are economically priced, original, and to the British taste," Hanssen said.

"But the selection of a good British trade partner, plus an effective advertising investment, is essential to success. Even then, a number of U.S. companies have failed to make the grade—usually because of insufficient market research and lack of information.

"Biggest profit spinners in the U.K.," Hanssen said, "are vitamins, and herbal and natural medicines."

According to Brun, sizable sales on the French dietetique market will most likely be limited to products that differ widely from those already for sale on the French market. If emphasis is put on their vitamin content, sales will mostly be restricted to the drug trade. Furthermore, products containing additives or processed elements, or if grown under the stimulus of fertilizer, or protected by insecticides, may not be sold as "natural" foods.

And above all, the flavor of the new product must be outstanding.

France's health (dietetique) product industry was inaugurated in 1950, with its first items mostly grain products. Now about 100 factories produce health products sold in some 1,200 dietetic stores throughout France.

Some 30-40 percent of the industry manufactures natural and processed cereal products (pasta, grain flakes, farina, and seminola), 5 percent produce vegetables in jars and cans, 10 percent fruit products in jars and cans (jams, jellies, fruit syrups, and fruits in syrup), and 13 percent make dietetic products containing no salt, sugar, or sodium.

Ten of the largest French manufacturers sell mostly to supermarkets and hypermarkets. Consumers buy these products on the basis of quality rather than for their dietetic characteristics.

The French are trying to improve the quality of their diets. True of all age brackets, it is especially so for the younger and older generations. □

An Interview with Dr. Norman Borlaug

The Green Revolution . . . and Beyond

Tightening of grain supplies this year serves once more to focus attention on the world's ability to meet future needs of an ever-increasing population. So far, however, the gloomy predictions of latter-day Malthuses have failed to materialize, thanks in large part to science and technology applied toward boosting yields in the developing countries. In the following article, *Foreign Agriculture* looks back at one of the outstanding agricultural achievements of our time—the Green Revolution—and ahead at some of the challenges to be faced.

"It took us from the beginning of agriculture, about 10,000-12,000 years ago, to gradually build to a total world food production of 3.3 billion metric tons. Yet in the next 40 years, if population growth continues as it is, we will again have to increase food production by that same amount."

This is the challenge facing farmers of the future, as described by Dr. Norman Borlaug—recipient of the 1970 Nobel Peace Prize and father of the Green Revolution—in an interview with *Foreign Agriculture*.

Dr. Borlaug has been conducting agricultural research in Mexico for 3½ decades, initially with a Mexican Government-Rockefeller Foundation project and since 1965 with the International Wheat and Maize Improvement Center (CIMMYT)—Centro Internacional de Mejoramiento de Mais y Trigo. The semidwarf wheats developed by Borlaug and his colleagues in Mexico were the first of the Green Revolution grains to spark production gains in Mexico, India, Pakistan, Turkey, Afghanistan, and other developing countries.

He also was the prime motivator behind an international training program that has prepared hundreds of young scientists to carry on the Green Revolution in their respective countries. These scientists, their national research programs, CIMMYT, and 10 other international research institutes are part of a worldwide effort to keep food production rising in step with the still-rapid population growth rate.

So far, this goal has been accomplished. Analysts at CIMMYT report that population in developing countries between the mid-1960's and mid-1970's rose 30 percent, grain output gained 31 percent, and imports held steady at 10-12 percent of consumption. And for the two major grains—wheat and maize—production rose by 50 and 38 percent, respectively.

Borlaug, in turn, is cautiously optimistic about the future, but also aware of the many obstacles ahead. Between 1975 and 1985, another 30 percent gain is projected for population in the developing countries. But no longer can these countries count on achieving at least half their production growth through area expansion—as was the case in the past decade.

Already, land is becoming scarce in the densely populated countries of the world. Borlaug said that in many such countries the forests have long since been destroyed. "They are at the stage where most of the animal waste is used for fuel to cook because there is no wood," he explained.

Elsewhere, potentially good agricultural land is being "covered up with industrial and residential sites, highways, and airports. This, too, adds to the pressures," he continued.

According to Borlaug, world population recently has been increasing by about 80 million a year. Thus, if area expansion were the only means available to maintain food consumption, 16 million more hectares of grains and 23 million more of other crops would have to be added to production each year.

"We do not have that kind of land," said Borlaug. "It could not be done that fast in any case, so we had better concentrate on more and better technology; that is the only way we can keep the ship afloat."

Borlaug acknowledges the complexity of this task. It requires not only greatly increased food production, largely through higher yields, but also equitable distribution to those who are hungry.

Just as important is the need to maintain the delicate balance between supply and demand. "As you well know, in the United States production has to be brought on stream at the right rhythm; otherwise you will have flooding of markets" explained Borlaug.

In the United States, the decrease in income resulting from such surges in production has led to a steady exodus of farmers from the land, with consolidation of farms into larger units but also some permanent loss of farmland. Borlaug's point is that soon we will not be able to afford this loss of land if the world is to meet its food needs in coming years.

But while the future may seem bleak when viewed in the context of present-day realities, Borlaug still has hope that civilization will win the food/population race. Certainly, he has seen much progress already from the Green Revolution.

It all began in Mexico: The first efforts, starting around 1944, to breed new, improved wheats, maize, and other staple crops for a country still harnessed to the varieties and cultural practices of centuries long past . . . the development of rust-resistant varieties of wheat . . . the application of modern technology to lagging Mex-

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By Beverly Horsley, Associate Editor, Foreign Agriculture.

ican agriculture ... the cross of Japanese dwarf wheats with the tall North American and Mexican varieties to produce the high-yielding wheats that were to become major components of the Green Revolution.

One of Borlaug's first undertakings in Mexico was to develop a wheat resistant to the most prevalent strains of rust—stem, stripe, and leaf rust. So-called because of the rust color it imparts to plants, this fungus kills by robbing a plant of moisture, clogging the passageways from stem to blade, and invading the leaf surface. At best, it greatly reduces yields, producing sparce, shriveled grain; at worst, it wipes out entire fields in its rapid-fire spread from plant to plant.

By selective breeding and use of techniques such as multilines that provide disease resistance from a variety of parents, researchers have been able to greatly increase the rust resistance of wheat. Still, the rust pathogen's ability to mutate periodically, and thus overpower previously rust-resistant plants, keeps scientists working to stay one step ahead of the fungus.

Another early objective of Borlaug's was to introduce Mexican farmers to modern agricultural techniques through a "package" approach that combined the use of high-yielding varieties with optimum levels of fertilizer, pesticides, and other inputs.

By shuttling his seeds from one experiment station at sea level to another 2,640 meters above sea level, Borlaug also was able to develop varieties that were insensitive to the length of a day. This meant they could be used in different temperature zones and continue to thrive.

The results were dramatic. "Starting about the time I began working in 1944/45 until a couple of years ago, there was a sevenfold increase in Mexican wheat production," said Borlaug. "Mexico became self-sufficient and remained so from 1956 up until about 1971 or 1972. Since then, there have been good and bad years, and there have been many other factors involved in the total production picture—shortage of water and then the unrest related to land reform in the last 2 years of the Echeverria regime."

The "population monster" that Borlaug often alludes to also has caught up with Mexico, which today has one of the world's fastest population

Clockwise from top: Sorghum crosses, part of CIMMYT's search for the "supergrains" needed to help feed an expanding population; closeup of a sorghum cross; harvesting triticale, a cross between wheat and rye; and scientist at work in maize test plot.

growth rates—3.0 percent annually.

The 1978/79 season thus found Mexico importing 3.1 million tons of grain, whereas a decade earlier it was self-sufficient.

But Mexico was only the incubator of the Green Revolution, which eventually spread throughout the developing world. Today, high-yielding semidwarf wheats bred at CIMMYT are grown on some 29 million hectares in Asia, Africa, and Latin America and add $3 billion a year to the value of world wheat output. Similar advances are being made in maize, rice, and other basic food crops.

This transfer of technology from Mexico to other developing nations began around 1960, when the Mexican Government's takeover of the research program there released Borlaug for work on other projects. One was a 3-month wheat study for the U.N. Food and Agriculture Organization (FAO) that was to take him to much of North Africa and the Middle East, Afghanistan, India, and Pakistan.

The trip convinced Borlaug that there was a severe shortage of trained scientists capable of putting theoretical knowledge to practical use. He proposed alleviating the shortage through a scholarship program aimed at preparing gifted young scientists to undertake programs in their countries similar to that in Mexico.

"I saw too many people who had returned from graduate study in Western Europe—or for that matter in American and Canadian universities—who did not know how to make their science work," said Borlaug. "They only had their heads stuffed full of theory, and they were as frustrated as I—they because they could not make science function, and I because I saw such a waste of talent."

The scholarship program recommended by Borlaug soon came into being. Beginning with about six to eight people, the resulting corps of trainees gradually built to more than 500 from 70 different countries.

Dr. Borlaug, meanwhile, had begun crossing Mexican wheat with second-generation crosses of Washington State winter wheat and Japanese dwarf varieties.

These new wheats proved to be a big improvement over those previously used in Mexico because of their short, stiff straw and dense growth. Borlaug explained that traditional varieties failed because "when you attempted to fertilize to utilize their highest built-in yield potential, especially under irrigation, they grew very tall. Then came a few windy days, after the last irrigation, and they were all on the ground."

Scientists in India and Pakistan soon became interested in the new wheats and—following tests on experiment stations in Pakistan and Egypt—began attempting to duplicate the impressive results achieved in Mexico.

India's initial import of 350 tons of seed in 1965 was followed by 18,000 tons the succeeding year. "From then on, it was only a question of getting enough fertilizer; getting the Government to establish reasonable fertilizer distribution systems and to set a floor price, announced before plantings, to break this vicious circle of prices falling from outlandishly high levels before harvest to unrealistically low levels once the

A Look at CIMMYT

One offshoot of the agricultural revolution that Dr. Borlaug helped launch is the International Wheat and Maize Improvement Center (CIMMYT) in Mexico.

CIMMYT, established in 1966, is one of the 11 such research institutes created since 1960 to spearhead agricultural research in basic food crops and agricultural policy. It also is a member of the Consultative Group on International Agricultural Research, which was formed in 1971.

It is headquartered at El Batan, just outside of Mexico City, on 77 hectares donated by the Mexican Government, and focuses on research in wheat, maize barley, and triticale. These crops account for about half the calories and proteins consumed in developing nations, and CIMMYT's high-yielding grains, perfected and released by national programs, now make up sizable shares of output in many developing nations.

High-yielding wheats, for instance, account for more than 45 percent of wheat production in the developing world and where grown have more than doubled the maximum yield potential—from about 3.5 metric tons per hectare to 8-9 tons. The task now facing researchers is to boost yields above 8-9 tons, which have held firm for almost a decade. This is especially imperative since production growth in the future must come increasingly from yield improvement, rather than area expansion.

CIMMYT's functions include grain breeding programs conducted at eight experiment stations within Mexico, four owned by the Institute itself and four owned by the Government (this research is conducted in cooperation with the Mexican National Agricultural Research Institute); coordination of international training of scientists from throughout the developing world; and assistance to individual countries in setting up national research programs.

Mexico was found to be an ideal site for the center because of its long-standing research experience in these basic grains and wide-ranging climatic conditions. Utilizing these ideal environmental conditions and all the yield-expanding tools of modern technology, CIMMYT scientists have developed "superbreeds" of grain that exhibit greater resistance to diseases and pest; increased responsiveness to fertilizer and other production inputs; and—in some cases—better nutritional qualities.

High-yielding semidwarf wheats bred at CIMMYT, for instance, are now grown on some 29 million hectares in Asia, Africa, and Latin America and have added about $3 billion a year to the value of world wheat output.

Early maturity, shorter plant height, and disease resistance also are being built into maize developed at CIMMYT and tested in 85 other countries. And the world soon may have access to high protein quality maize as a result of research carried out over the past decade.

Barley varieties have undergone similar improvement, while triticale—a cross between wheat and rye—has been refined to the point where it is now grown commercially in a score of countries, including the United States and Canada. □

harvest had begun."

The results are evident today. In 1955, India's total wheat production was about 10.5 million tons. In the 1978/79 season, the harvest was 31.5 million tons, and in 1978/79, it was 35 million.

(The total foodgrain crop in 1979/80, however, will be down 16-20 percent from last year's record of 131.4 million tons as a result of insufficient rainfall during the summer monsoon.)

"The unfortunate part is that there are still a lot of hungry people in India who need more food," Borlaug continued. "Many of them are unemployed or underemployed. Now the question is how to get that food out of the Government warehouses into the stomachs of the hungry and low-income people."

He sees the new challenge for India—and other developing countries in similar positions—as being one of putting these unemployed and underemployed to work on projects to improve the infrastructure—in developing farm-to-market roads, more and better irrigation canals, drainage ditches, and reforestation.

Borlaug also cautioned against complacency among agricultural researchers. "You cannot be complacent about epidemic diseases, whether in wheat or in rice. This calls for a good, aggressive research program: monitoring for changes in the disease pathogens; rapidly multiplying varieties that cover not only new races of disease but the old races that are present; and getting such varieties into farmers' hands before disaster strikes."

The Green Revolution, meanwhile, continues its spread through the developing world. Perhaps the "breathing spell" that it has given us will allow farmers and science to develop the technology and skills needed to face the challenge ahead. Dr. Borlaug is hopeful.

"It is my hope that we can adjust population growth worldwide so that all who are born in the world have a chance for the necessities of a halfway decent life. Without food in your stomach, a shirt on your back, a roof over your head, a job to gain your livelihood, schools to develop the talent of your children, the opportunity to have medical care, life ceases to be meaningful . . . it is pretty miserable." □

World Cotton Harvest Up 7 Percent—Consumption To Reach Record High

World cotton output and consumption are projected to increase this marketing year (August-July) from year-earlier levels—production by about 7 percent to 63.8 million bales[1] and consumption to a record 63.1 million bales from 1978/79's 62.8 million bales.

Weather conditions have been generally more favorable this season than last, and record-high yields are anticipated. Although total planted area is marginally larger than last year's, cutbacks in China, Nicaragua, Iran, and Turkey have more than offset a 5.6 percent increase in U.S. area.

World trade could approach 20 million bales in 1979/80, 500,000 bales larger than last season's. Countries expected to export more cotton this year than last include the United States, the USSR, Sudan, India, and Pakistan. Imports are likely to be up in China, Korea, and several other Asian countries.

Continued strong demand plus an apparent decline in China's cotton production are the main reasons for the expected increase. Cotton consumption and imports in textile producing countries are generally expected to expand, with Korea showing the greatest increase.

China's imports are projected at 3 million bales, 800,000 bales above the estimate for 1978/79. Cotton imports by Western Europe probably will increase only marginally, as strong pressure from textile imports may continue.

The projected large crop in the USSR should provide larger export availability. During most of the 1978/79 year, Soviet cotton prices were above U.S. prices, but in September, U.S. cotton was priced higher. The Soviets reportedly were selling a fair volume of cotton to West European customers in September.

Many cotton exporting countries have smaller supplies available for export this season because of lower beginning stocks. However, several countries—such as Pakistan, Sudan, and Colombia, where production is recovering from the below-average 1978/79 levels—expected to expand their exports well above last season's levels.

Exports from Iran and Nicaragua are expected to decline sharply in 1979/80 because of civil disturbances.

India, usually a net importer, could export 400,000 bales this season, compared with year-earlier exports of 195,000 bales.

The U.S. export estimate for 1979/80 is 6.8 million bales, up from 6.2 million bales last season. Shipments during the first 2 months of the season were slightly below the heavy movement of a year earlier. Export commitments, including exports plus outstanding export sales, totaled 6.3 million bales as of October 28—more than 1.8 million bales higher than year-earlier commitments.

China has purchased about 1,350,000 bales, compared with 648,000 bales in 1978/79. Sales could total 7.5-8 million bales, compared with last season's 7.1 million bales.

Global consumption for 1979/80 is forecast at 63.1 million bales, 300,000

[1] 480-lb bale=218 kilograms.

This analysis was prepared by the Tobacco and Cotton Divison, Commodity Programs, FAS.

bales above last season's level. The strong expansion in consumption during 1978/79 is continuing into the first half of 1979/80. The economic slowdown, which is responsible for a projected 3 percent decline in U.S. cotton consumption, has not yet resulted in any significant decline in foreign use.

However, a higher rate of inflation, a slower pace in real growth, and costlier interest charges could cause a drop in cotton consumption in early 1980. Some major textile producing and exporting countries already are reporting difficulties in forward sales of textiles.

With the relatively small increase expected in foreign production and continued expansion in use, foreign stocks will likely decline further during 1979/80 from the 17.6 million bales estimated for August 1, 1979. Economic uncertainties and high interest rates apparently are causing spinners to keep their stocks at minimum levels.

The expected large U.S. crop will mean an increase in U.S. stocks of about 1.7 million bales, but world stocks are expected to increase about 1 million bales by August 1, 1980.

The production outlook for 1979/80 in major producing countries:

United States. The largest production increase of any country—3.7 million bales—and anticipated higher yields are the major factors in the projected output of 14.54 million bales. Favorable weather played a major role in improving yields. Several factors influencing U.S. producers to plant more cotton were higher prices, the absence of a set-aside program, and favorable moisture conditions (especially in Texas).

USSR. Production is forecast at 12.6 million bales, up significantly from last year's disappointing crop. Expanded irrigation area has resulted in a slight total area increase to 3.1 million hectares. The numerous replantings of 1978/79 were not required this year as the weather was more favorable, allowing the crop to become established with less delay. Good weather during the summer helped the crop.

China. Adverse weather and some switching to food crops will hold output to about 9.8 million bales, compared with 10 million bales in 1978/79. The disappointing cotton yields of the past 2 years also have had an adverse influence on cotton plantings. Yields are expected to be below earlier expectations.

India. Drought in some producing areas and flooding in others are largely responsible for the projected sharp drop in production to 5.75 million bales, compared with last year's 6.26 million bales. Yields probably will be less than expected earlier in the season.

Pakistan. The outlook is for a crop of 2.8 million bales, compared with 2.1 million bales in 1978/79. The erratic 1979 monsoon had only minimal effect on the crop, as over 90 percent of Pakistan's cotton area is irrigated. Pakistan continues to seek improved cotton varieties and cultural practices.

Egypt. Although yields may not reach last year's record level, they will remain high, and combined with slightly larger area could result in a total output of 1.9 million bales. Effective efforts to control pests and a shift to improved varieties have played major roles in achieving the higher yields. The variety shift has resulted in a 15 percent increase in long-staple cotton area and a 40 percent reduction in medium-staple area. Extra-long staple area has been expanded by about 4 percent.

Iran. Production is expected to be about 505,000 bales, about 20 percent below last year's level. The cotton-producing areas of Gorgan and Gonbad were centers of political unrest during the planting season. Some large agricultural industries and farm cooperatives were not in operation during the planting season. Area is estimated at 220,000 hectares, down significantly from last season's 280,000 hectares.

Turkey. Production is forecast at 2.18 million bales, virtually unchanged from last year's level. However, yields are improving significantly, as area is down from last year's 653,000 hectares to 606,000 hectares. Weather conditions thus far have been optimal and insect damage minimal.

Greece. Area and production are expected to decrease, with yields remaining relatively unchanged. Production is forecast at 600,000 bales, compared with 703,000 bales in 1978/79, and area at 143,000 hectares, compared with 168,000 hectares a year earlier. A shortage of farm labor is a major factor in the decreases. Mechanized picking continues to expand as producers try to compensate for the labor shortages.

Brazil. Use of a new variety—IAC 17—is the main factor behind a projected increase in production to 2.75 million bales from last season's 2.6 million bales. Area is estimated at 2.04 million hectares, compared with 1.97 million a year earlier. During the 1978/79 season, about 50 percent of the cotton area utilized IAC 17 and yields increased substantially. This season, almost 100 percent of the southern cotton area is estimated to be growing IAC 17. The gain in the southern area will more than offset any decrease in the northern cotton area.

Argentina. As yields recover from last year's depressed levels, production should increase to about 870,000 bales. Area is expected to decrease from the 1978/79 high because of the tight financial situation—resulting from last year's poor crop—facing producers. Some land is being shifted to sunflowers and soybeans, which have lower production costs.

Colombia. Production is expected to recover to about 530,000 bales in 1979/80 as farmers respond to higher prices and improved financial positions and shift back to cotton. Low prices and discouraging yields in 1977/78 had caused production to plunge downward.

Peru. Good weather and freedom from pests helped 1978/79 production of 370,000 bales. This favorable experience, combined with higher prices, is encouraging a further increase this year to a projected 450,000 bales. Improved cultural practices and greater availability of improved varieties should increase yields.

Mexico. Cotton area has been expanded to about 385,000 hectares, but unfavorable conditions may reduce yields, holding production near 1.5 million bales. Cool, wet weather and disease and insect damage are expected to hold down yields.

Guatemala. Production in 1979/80 is projected to remain relatively high at 730,000 bales, but may not match 1978/79's record yields and production. Area is up slightly to 130,000 hectares.

Nicaragua. Cotton area was drastically reduced this year because of the war. An estimated 45,000 hectares have been planted, some after the optimal planting time had passed. Production is forecast at about 100,000 bales, compared with 499,000 bales last year. □

South Africa's Container Program Moving Ahead At Three Major Ports

South Africa is well into a major program to containerize many of its agricultural exports, although shipper reaction has not been 100 percent favorable.

Despite these reservations, containerized shipments of farm and nonfarm products are increasing rapidly. Most container shipments go through Durban followed, in descending order, by Port Elizabeth and Cape Town.

South Africa's container terminals have already established themselves as rapid handlers with good efficiency. Containers are handled at a rate of more than 1,000 a day at each two-crane berth. This performance exceeds that of some ports in France, Brazil, and Israel.

For deciduous fruit, Cape Town is the No. 1 port, largely because most of it is grown within a radius of 70 miles of this shipping point and so offers a convenient gateway to Europe.

Most citrus fruit, also moves through Cape Town, even though the fruit is grown some distance to the north, mostly in the Transvaal and Natal. Sizable volumes also move through Durban and smaller amounts go through Port Elizabeth and East London in South Africa and Maputo in Mozambique.

In 1979, the South African Citrus Exchange expected to ship about 30 percent of its Europe-bound fruit in containers. Since Europe takes some 70 percent of South Africa's total citrus exports, this is no mean amount.

Nineteen seventy eight was the first year in which containers were used to any extent by the Exchange. It was also a year when European demand for South African citrus was so strong that the fruit quickly moved into retail outlets.

However, the Exchange wonders if, in a slower season, fruit condition would hold up in container shipments, particularly since the citrus would have to be held in South Africa for some time before being moved to Europe.

Although Exchange officials believe the container has found a permanent place in the citrus export trade, a spokesman for the agency said there will be little or no future growth in the use of containers for citrus shipments overseas.

South Africa's dried fruit exports have ranged from 4,500 to 13,500 tons a year recently, and some are being shipped in containers.

Since few individual customers can take a full container, loaded units are only sent to agents in overseas markets. But the Board sees some future expansion in this use of containers.

Officials of the Deciduous Fruit Board, the agency responsible for exporting South Africa's noncitrus fruit crops, concluded after an 18-month trial period that the role of containers in South Africa's fresh deciduous fruit export trade will gain little additional importance in the future.

Much of South Africa's exports of canned deciduous fruit is being moved to Europe in containers and a spokesman for the Canning Fruit Board (the agency that regulates South Africa's canning industry) recently said that the system is working satisfactorily, especially since it is reducing the Board's shipping costs.

The Canned Fruit Export Board noted that although containerized ships were not getting as much freight as they had expected, from the Board's viewpoint the service works well.

The Board's European customers are happy with the service, the spokesman said, and "that is important." Sailings take place weekly from Cape Town, and containerization has cut damage to minimal levels, he said.

One of the Cape Town's problems is that its container area was started as an extension of a conventional port. A shift was made in midstream and resulted in a concrete mass jutting into the harbor, more than a half-mile long and 300-400 yards wide, an arrangement with some inconveniences.

Lifting equipment is in place or being constructed and will increase the number of ships that can be handled at one time from the present two to three. However, the port's refrigerated container facilities are not adequate, even though the port handles sizable shipments of containerized fresh deciduous fruit.

The port's fruit arrivals pass through a receiving facility 2½ miles from the container loading area. The fruit comes palletized but not cooled. After being graded, it is stored in large-capacity coolers and formerly was loaded at the fruit facility directly into reefer ships on the original pallet. To some extent this is still being done; but for container shipments, the fruit must be loaded into containers and trucked to the loading area.

While awaiting arrival of a container ship, only 150 deciduous fruit containers at one time can be kept cool by clip-on refrigerators. This limits the port's fruit-handling capacity.

However, immediate plans call for the construction of facilities to store 600 refrigerated containers. Later the total will be increased to 1,000 containers, and in a third phase, possibly to 2,400. The final storage figure will be influenced by the decision whether the handling area will be covered or not, a ruling that will affect the area's layout and design, and possibly its size.

The trend seems to be to pre-cool and containerize more of South Africa's fruit at inland packing facilities. Pending sizable expansion of port container-handling facilities, the prospect is that as much as two-thirds of South Africa's fruit (deciduous and citrus) will continue to move by reefer ships.

The original 1977 plan called for the construction of 10 container ships to ply between South Africa and Europe. This figure was later cut back to nine ships, but only seven of these are now operating. The ships make runs to Europe every 7-8 days, stopping at Cape Town, Port Elizabeth, and Durban before sailing north. On the return trip they again stop at the first two South African cities.

In Europe, the container ships make one port call each in Britain, the low countries, and Germany, apparently varying the first port-of-call on each trip. Among the agricultural products being carried are deciduous fruits, canned foods, dried fruits, frozen foods, wine, wool, and grain products.—*Based on report by James O. Howard, U.S. Agricultural Attaché, and Corneli H. Germishuis, Agricultural Specialist, Pretoria.* □

FACT FILE

USDA Cooperators: Partners in Promotion

ROLE IN MARKET DEVELOPMENT. The Foreign Agricultural Service (FAS) of the United States Department of Agriculture has the lead governmental role in developing farm markets overseas. An important part of the FAS export expansion effort is oversea promotion work carried out jointly with market development cooperators from private industry—farm-oriented nonprofit groups, each representing its own commodity interest in foreign markets. Today there are more than 50 of these groups working with FAS on a continuing basis. All told, the cooperator program represents the interests of over 3.5 million farmers, 1,500 U.S. cooperatives, and more than 7,000 processors and handlers.

A LONG HISTORY. The role of cooperators resulted from the Agricultural Trade Development and Assistance Act of July 1954 (P.L. 480). Congress and other policymakers at that time recognized that the United States had an agricultural bounty that should be used not only for the benefit of U.S. consumers, but also for the growing populations in other countries of the world. The potential for commercial agricultural sales was there. What needed to be done was to develop the markets overseas.

Thus, soon after passage of P.L. 480—and following indepth studies of the appropriate role of government in expanding farm trade—USDA initiated its market development program, making the crucial decision to work with nonprofit, broadly based, agricultural trade associations representing U.S. farmers wherever practicable.

The National Cotton Council was the first agricultural market development cooperator, signing an agreement with FAS for research and development of global cotton markets in May 1955. The newest cooperator group is the National Forest Products Association, which joined the ranks in October 1979.

FOREIGN INVOLVEMENT. The cooperator program is by no means solely a U.S. venture. Today, about 130 foreign cooperators—called "third-party cooperators"—in 70 countries are working closely with U.S. cooperators and FAS in planning and implementing market program activities. They also are sharing in the program costs. This involvement reflects the mutually beneficial results of the activities undertaken.

In the early years of the program, when the mutual benefits were not readily apparent, foreign participation was modest. However, by the early 1960's market development was beginning to pay important dividends, and annual foreign contributions reached $2 million. Since 1965 foreign contributions to the program have risen rapidly, from $2.4 million (20 percent of total program expenditures) to $19.4 million in 1979 (about a third of expenditures).

ACTIVITIES IN ESTABLISHED MARKETS. In established markets, such as Western Europe and Japan, the basic job of the cooperator program is to support a vigorous U.S. export trade in the face of intense competition from third country and domestic suppliers, who often enjoy high levels of subsidization.

Examples of the kinds of marketing efforts currently being conducted in these established markets are:

- Technical trade servicing—which means helping buyers overseas to choose the right U.S. product and to use that product efficiently;
- Joint promotion efforts with host country businessmen; and
- Trade and consumer press contacts and advertising.

ACTIVITIES IN NEW MARKETS. Increasing emphasis is being placed on expanding U.S. agricultural exports to new markets. In these new markets—such as those emerging in the oil-rich OPEC nations and the Socialist planned economies—a different set of marketing strategies is needed.

Cooperator activities in these areas are much more heavily weighted towards the early phases of market development. Representations to government and trade, marketing research, product testing, product demonstrations, and educational activities are far more prominent.

PROJECT SELECTION. While the cooperator program is sponsored, guided, and partially funded by FAS, it is the cooperators who initiate market development projects and have the responsibility for carrying them out.

Developing a project plan requires a great deal of background research. Cooperators must study the use, or lack of use, of a particular commodity in a particular market; the potential capability for the country to produce the commodity on its own; competition from other suppliers and the economic situation and prospects for the future that could have a bearing on the ability of the country to import the commodity. Cooperator organizations must also assess their own available resources for developing the market and U.S. agriculture's ability to deliver once the demand is there. Only after this basic spade work is done can a plan of operation be drafted. Basically, this "marketing plan" sets forth

the overall objective, and details the specific programs and projects to be undertaken.

Many different groups participate in fleshing out the plan. Included are the cooperator staff, both U.S. and foreign national; U.S. agricultural attachés, trade officers, and other FAS officials. All these individuals contribute ideas and concepts to improve the effectiveness of the plan.

FINANCING. Financing of cooperator-generated market development projects is shared by: FAS, the agricultural cooperator, and—the depending on the type of activity—by the foreign organizations involved in the import and usage of the particular commodity.

The major share of this funding comes from the private sector. FAS expenses connected with the program are small compared with the value of U.S. agricultural exports. For example, in fiscal 1979, when farm exports totaled $32 billion, FAS spent just $17 million for the cooperator program. On an overall basis the cooperators and the foreign cooperator groups match FAS contributions two to one.

To be eligible for USDA financial assistance, a cooperator project must give promise of effectively contributing to the creation, expansion, or maintenance of agricultural markets abroad, with primary emphasis being granted to those in potential dollar markets. Preference is given to promising early results and lasting benifits.

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Brazil

Wheat Import Needs Remain High, Despite Good Harvest

Brazil's 1979/80 (Oct.-Sept.) wheat harvest is forecast to total only about 2.5 million metric tons from a record-large planted area of about 4 million hectares, substantially less than the 3.5-million-ton crop projected before adverse weather struck major production areas. Wheat imports during the year are projected at 4-4.2 million tons.

Good planting conditions and weather through mid-July 1979 created considerable optimism over crop prospects. However, scattered frosts hit western Paraná in July, destroying about 20 percent of the projected 1.8-million-ton crop there. More recently, heavy rains, high winds, and high humidity damaged production in Rio Grande do Sul and to a lesser extent the crops in Paraná and Sanata Catarina.

As a result, the wheat yield per hectare is expected to average around 725 kilograms. The 3.1-million-ton estimate is considerably below the earlier optimistic Government forecast for yields of 1,000-1,100 kilograms per hectare, or a total crop of 3.9-4.3 million tons.

A prudent buyer in world wheat markets, Brazil also diversifies its source of supply. During the past 2 years, Brazil has bought wheat not only from its traditional sources—the United States, Canada, and Argentina—but also from France, Uruguay, and South Africa.

The U.S. shares of Brazil's annual wheat imports during 1975-78 were 78, 44, 41, and 66 percent, respectively, while Canada's shares in this period were 13, 35, 32, and 28 percent.

Brazil and Canada recently signed a 3-year trade agreement calling for a minimum 300,000 tons of wheat to be imported by Brazil each year beginning in 1980.

USDA's Commodity Credit Corporation granted Brazil a $50 million line of credit that allowed purchase of about 300,000 tons of U.S. wheat. The agreement called for shipment prior to August 31, 1979.

These purchase agreements, along with the policy of actively seeking lower priced wheat from nontraditional sources, point up Brazil's efforts to minimize its outflow of foreign exchange.

Although Brazil has increased wheat production tenfold since the mid-1960's, output is still only about half of domestic consumption. Research efforts are being directed at building disease resistance into higher yielding new varieties, but yields remain relatively low.

The record yield of the 1974 crop was only 1,200 kilograms per hectare, compared with neighboring Argentina's record yield of 1,710 kilograms per hectare for its 1976/77 crop.

Brazil's yields in the poor crop years of 1975-77 were only 500, 830, and 710 kilograms per hectare, respectively. Producers continue to be plagued by such hazards as weather-related disease problems and untimely frosts.

Based on upward trends in population, urban migration, and gross national product per capita, market demand for wheat products will likely continue to advance in the near future.

Continuance of Brazil's strong consumer subsidy for wheat will further escalate demand. Elimination of this subsidy would probably take place only gradually.

Various proposals have been made in recent years to slow the growth of wheat consumption by mixing wheat flour with other types, particularly soy flour. However, action on these proposals is hindered by insufficient milling capacity to produce soy flour in required quantities, the high cost of soy flour relative to wheat flour, and logistical problems in distributing soy flour to mills.

As a result of these factors, it seems unlikely that Brazil will attempt to curtail normal growth of wheat demand in the short run. The Brazilian Wheat Board will likely continue to follow increasing demand with corresponding increases in the annual import quotas for wheat.

Wheat consumption in Brazil is subsidized through the sale of both domestic and imported wheat to millers at prices below cost.

Until 1972, the price of wheat to mills was above the cost of imports, with the excess used to finance the domestic producer price. Since 1973, wheat has been made available to mills at prices considerably below the acquisition cost. While the cost to mills was increased in 1977 and 1978, these costs remained below the cost of imports.

Brazil generally imports hard wheat to blend with its domestic production of semisoft varieties.

Brazil's policy is to purchase only one class and quality of wheat—U.S. Hard Winter—from the United States, its traditional main source. This policy reflects difficulties in transportation and distribution, and the impracticability of allocating specialized wheat to specific processors in Brazil.—*Based on dispatch from G. Stanley Brown, U.S. Agricultural Attaché, Brasília.* □

Malawi

Boom in Tobacco Output, Exports

Malawi's booming, efficient tobacco industry has almost tripled its production and export of leaf in the past 10 years, largely as a result of United Nations sanctions against Rhodesia, Africa's leading tobacco producer and exporter. Tobacco now accounts for more than half of Malawi's total export earnings.

Malawi's major export markets are European Community members France, the Netherlands, and the United Kingdom (Malawian tobacco enters the EC duty-free), and the United States.

The 1979 tobacco crop is estimated at around 64,000 metric tons, compared with 55,000 tons in 1978 and only 22,000 tons in 1970.

Exports of leaf during 1979 are projected at 55,000 tons, compared with 53,377 tons in 1978 and 17,081 tons in 1969.

Because of the troubled conditions within Rhodesia, many Rhodesian tobacco farmers have emigrated to Malawi during the past 10 years to manage flue-cured farms for Malawian owners. Flue-cured production in Malawi has increased from 2,750 tons in 1969 to an estimated 25,356 tons in 1979, and burley output has expanded from 3,472 tons in 1969 to an estimated 15,921 tons in 1979.

However, the rapid gains in production of recent years may be headed for a slowdown. There is little additional tobacco land available, fuel (firewood) to flue-cure is in short supply, and experienced farm managers are at a premium. And the removal of the U.N. sanctions against Rhodesia could be expected to result in increased production in Rhodesia and act as a damper on Malawian expansion plans.

Malawi's flue-cured farms tend to be much larger than those in the United States—over 200 acres is the average size for Malawian tobacco farms, compared with less than 10 acres for their counterparts in North Carolina. Many of the tobacco farms in Malawi are owned by Government officials and operated by Rhodesian managers.

Burley output is mostly from tenant farmers, each of whom works an area of about 2 acres. The estate owner oversees production, purchases the crop from the tenant, and prepares it for sale at auction.

The traditional tobaccos grown in Malawi are fire-cured and sun-air cured Fire-cured is grown by about 55,000 smallholders, whose plots average less than 2 acres. The Agricultural Development and Marketing Corporation is required to purchase all of these tobaccos offered for sale by farmers.

Production of fire-cured increased from 16,402 tons in 1978 to an estimated 19,777 tons in 1979, while production of sun-air cured decreased during the same period from 3,224 tons to 2,812 tons.

Tobacco is sold in bales of 36 by 24 by 24-30 inches, weighing 110-125 kilograms each. Each farmer is assigned a number that is stenciled on the bale wrapping. The grading system, like that in the United States, is based on stalk position, leaf qualities, and color. There are 203 flue-cured grades in Malawi.—*Samuel D. Smith, Tobacco and Cotton Division, Commodity Programs, FAS.* □

Mexico

Still Relies on United States For Bulk of Grain, Oilseed Imports

Ending a year marked by erratic weather and severe transportation difficulties, Mexico is expected to continue importing large quantities of grain and oilseeds in 1979/80—with the United States again meeting most of the Mexican import needs.

Largely because of a drastic expected drop in Mexico's 1979/80 corn crop and a sharp drawdown in stocks, the country's grain imports are seen rising to record levels this season. Mexico's oilseed imports—mostly soybeans and sunflowerseed from the United States—are forecast to climb slightly despite a 16-percent gain in total domestic output.

Mexico's total grain output for 1978/79 is now placed at 16.6 million metric tons, 215,000 tons above the previous estimate. A record spring grain sorghum crop in the important Matamoros area is almost entirely responsible for the larger grain outturn.

However, continued drought conditions throughout the major grain growing areas in central Mexico along with severe frosts have substantially reduced several of the 1979 fall grain harvests.

As a result, total grain production during 1979/80 is now estimated at nearly 14.8 million tons. Thus, it is anticipated that a record 5.4 million tons of grains must be imported to satisfy Mexico's grain consumption requirements.

A severe shortage of both boxcars and locomotives has been restricting the efficient movement of domestically produced and imported farm products.

Although the Government is placing priority on the transport of imported grains and oilseeds, concern exists whether Mexico will be able to handle a monthly average of 500,000 tons of imported agricultural commodities during 1979/80. Of prime importance will be maintaining a steady flow of imported corn to rural areas struck by crop failures.

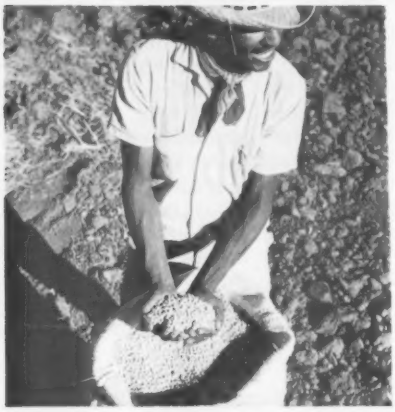
The 1979 fall corn crop, which was largely harvested by December, is described as very poor as a result of unfavorable growing conditions. In early September, crop damage was extensive because of heavy frosts. In addition, inadequate rainfall in September-November in many areas left the corn shriveled in the ear.

Also, some important growing areas in the warmer, lower altitudes now have no corn at all due to the extended summer drought since many farmers turned their cattle into the fields to eat the half-grown corn. Many farmers in these areas have been forced to sell their cattle and now face bare fields waiting for the next crop cycle.

The Government has initiated emergency work programs for these disaster areas.

The 1979 fall corn crop is now estimated at no more than 8.3 million tons. Together with the anticipated outturn of 1.1 million tons from the 1980 spring crop, Mexico's total corn production for 1979/80 is pro-

The making of a Mexican harvest. Clockwise from top: combine at work in cornfield; stand of wheat glowing in the sun; and worker scoops up soybeans for display. Despite gains in its corn, wheat, and soybean crops in 1979/80, Mexico again will look to the United States for most of its imports of grain and oilseeds.



jected at 9.4 million tons—800,000 tons below the year-earlier level.

Wheat production during 1979/80 is estimated at 2.2 million tons, down 150,000 tons from the 1978/79 production.

Mexico's 1979/80 sorghum production is estimated at 2.3 million tons—600,000 tons below the previous estimate and 900,000 tons under the year-earlier output.

The reduced grain sorghum estimate stems from continued drought conditions in the major producing States of Guanajuato, Jalisco, and Michoacan where the 1979 fall crop is expected to be down by as much as 50 percent from the year-earlier total.

Based on Mexico's reduced production, corn imports during 1979/80 are estimated at 2.3 million tons—up substantially from the previous projection and nearly 1.7 million tons larger than those of 1978/79. The country's 1979/80 ending stocks of corn are expected to be sharply reduced, thus continuing the recent downward trend.

With the revised rise in Mexico's wheat production during 1979/80, wheat imports have been adjusted downward to 1.2 million tons, most of which will come from the United States.

Mexico's sorghum imports during 1978/79 are now placed at 1.4 million tons, with the United States supplying 80 percent of these imports and Argentina the rest. Because of the sharp decline in Mexico's 1979/80 sorghum crop, imports are expected to increase to 1.8 million tons during 1979/80 marketing year.

On the oilseed side, Mexico's total production in 1978/79 is now placed at 1.8 million tons and is projected to rise to 2.1 million in 1979/80, owing mainly to the anticipated large increase in the soybean crop.

Soybean outturn is expected to nearly double in 1979/80 to 600,000 tons as a result of a 125,000-hectare increase in harvested area. Despite an expanded safflower area, lower yields will hold 1979/80 output to 570,000 tons, only 20,000 tons above the year-earlier level.

Poor growing conditions throughout most of the season also held cottonseed production to an estimated 560,000 tons in 1979/80 (3 percent below that of 1978/79), despite an expansion in area.

Mexico's sesame crop during 1979/80 is now estimated at 160,000 tons, about 30,000 tons above the estimated 1978/79 output. The increase stems from expansion in plantings. Most of Mexico's sesame production is exported, with shipments in 1978/79 placed at around 100,000 tons. This season, however, exports are not expected to exceed 80,000 tons because of Government export price controls and increased competition on the world market.

Because of the extended drought, the country's copra production is predicted to drop about 20,000 tons to 110,000 tons. Sunflowerseed production is seen doubling from 10,000 tons in 1978/79 to around 20,000 this season, but imports—mainly from the United States—will remain high to cover a projected shortage in oil availabilities.

Significant disruptions in the continuous flow of oilseed imports during 1978/79 has resulted in downward revision of Mexico's oilseed imports.

Oilseed imports are predicted to rise slightly in 1979/80 to more than 910,000 tons, including 700,000 tons of soybeans and 200,000 tons of sunflowerseed.

The United States is expected to supply 90-95 percent of Mexico's soybean imports as well as being the dominant supplier of sunflowerseed.—*Based on reports from the Office of U.S. Agricultural Attaché, Mexico City.* □

East Germany

Gains Seen for Exports Of U.S. Grains to GDR

Exports of U.S. grains to the German Democratic Republic (GDR) are expected to improve substantially in 1979/80 as a result of a smaller GDR grain output and the crop shortfall in the Soviet Union—normally, a leading grain supplier of East Germany.

In the past few years grains have accounted for about three-fourths of U.S. agricultural exports to the GDR, with corn comprising about three-fourths of these grain exports. This trend is expected to continue in 1979/80 (July-June).

Since the establishment of diplomatic relations between the United States and the GDR in 1974, commercial trade between the two countries has been expanding. Today, the GDR ranks as the second largest customer (behind Poland) of U.S. agricultural commodities to Eastern Europe. In calendar 1978, U.S. farm exports to Eastern Europe rose 31 percent to $1.17 billion, including $203 million to the GDR and $516 million to Poland.

The total East German grain crop for 1979 is estimated to have been some 500,000 tons less than the 9.8 million metric tons produced in 1978. Delayed fall planting, a prolonged cold winter, and difficult spring conditions contributed to most of the country's grain shortfall.

The quality of the wheat and rye crops is believed to be better than that of last year. However, the quality of winter barley is relatively poor, and malting barley is believed to contain too much protein for good brewing.

The trade picture still remains a bit cloudy. Traditionally, the USSR is an important supplier of wheat and barley to the GDR. Because of the shortfall in the Soviet grain crop this year, the USSR may not make any grain shipments at all to the East Germans during 1979/80.

Consequently, the key variable in assessing potential U.S. grain exports to the GDR will be the level of subsidy rates for wheat and barley by the European Community (EC).

The GDR's grain import requirements during 1979/80 will be around 3 million tons, similar to the patterns of the past 2 years. However, the portion from the United States is expected to rise from around one-third last year to more than one-half during this marketing year.

U.S. wheat exports to the GDR may range between 250,000 and 300,000 tons during 1979/80 (July-June), compared with 118,000 tons a year earlier.

U.S. corn exports to that market may rise from 966,000 tons in 1978/79 to 1.2 million tons this year. In addition, U.S. exports of grain sorghum to the GDR could climb to more than 150,000 tons, compared with none in 1978/79.

If EC export subsidies for barley do not offset competitive U.S. corn prices, U.S. corn exports to the GDR could rise substantially above the 1.2 million tons currently estimated.

These projections assume that there will be a small decrease (1 percent) in the GDR's nonfeed use of grains, and that the increased availability of green fodder will result in a 2-percent drop in feed use of grains. Because of the lower but better quality wheat crop in the GDR, wheat used as feed is expected to decline about 14 percent.

—Based on report from Roger S. Lowen, U.S. Agricultural Attaché, Berlin. □

Bahrain

Guests From Five Arabian Countries Try U.S. Foods

Visitors to the FAS food exhibit at Manama, Bahrain, examine peanuts, peanut butter, and honey from Georgia. Over 500 persons attended the Bahrain exhibit.

American food delicacies—strawberries from California, steaks and roasts from the U.S. West, corn on-the-cob from the Midwest, and seafoods from New England—were among the U.S. foods featured at an American Food Festival in Manama, Bahrain, October 15-22, held in conjunction with an FAS-sponsored food exhibit.

Of the over 500 persons from Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, and Bahrain, itself, who visited the 3-day exhibit at the Bahrain Hilton—many later were able to enjoy some of the exhibited foods in the hotel dining-room.

The foods in the exhibit—displayed by 28 U.S. companies or agents representing U.S. firms, four USDA cooperators, and one regional trade organization—ranged from several already known in the area, such as wheat pilaf

and bulgur, to more unfamiliar ones such as portion-size meat servings, various types of instant foods, and snack foods. A number of the firms and products were new to the region.

Opened by U.S. Ambassador to Bahrain Robert Pelletreau, who was assisted by Agricultural Trade Officer Joseph R. Butler, the exhibit resulted in a sizable volume of on-floor sales and the naming of several agents to handle U.S. products in the countries of the Arabian Peninsula. Participants also expect future business resulting from the October exhibit to be brisk.

Bahrain is both an agricultural importer and reexporter. Many American food products pass through Bahrain's warehouses enroute to the countries and emirates on the Peninsula.

U.S. farm product exports to Bahrain rose from some $5 million in 1977 to about $6 million a year later.

The following data show the value of U.S. agricultural exports during 1977 and 1978 to some of the other countries on the Arabian Peninsula, in millions of dollars:

	1977	1978
Saudi Arabia	171.0	315.0
Qatar	1.0	5.4
United Arab Emirates	12.5	31.0
Kuwait	16.0	20.6

FAS each year sponsors a heavy schedule of overseas promotions. In fiscal 1980, these will include participation in 10 FAS solo exhibits, three attaché exhibits, and six national and international livestock and dairy shows, and visits by sales teams to 12 cities.

Firms or individuals interested in participating in any of these events should write to the Director of the Export Trade Services Division, Foreign Agricultural Service, USDA, Washington, D.C., 20250. Telephone (202) 447-6343. □

Ethiopia

Problems Plague Economy Despite Rising Coffee Exports

Ethiopia, hinged to the swings of virtually a one-crop economy, is facing another round of problems. Although the country's coffee exports rose to near-record levels, earnings in the coffee year that closed September 30 actually decreased because of a decline in prices.

The 1978/79 coffee disappointment followed on the heels of a similar situation in 1977/78. These coffee reverses joined with a drop in other exports, increased imports, and war-caused disturbances in the economy add up to a continuing erosion of foreign exchange reserves. This contrasts starkly with the favorable trade balance that existed during the previous 2 years.

The outlook for the current coffee year points to little improvement even if Ethiopia produces another record coffee crop. Although the international price of coffee may improve, the gain may be marginal and may cover only the decline in value of other agricultural exports. Ethiopia's rising import bill plus other factors such as the maintenance of a war status, the high cost of petroleum, and rapid inflation will continue to keep pressure on the country's economy.

Ethiopian coffee exports during 1978/79 (Oct.-Sept.) are estimated to have totaled about 85,000 metric tons, 28 percent above 1977's level and very close to the record of some 86,000 tons in the 1971/72 crop year. Green coffee production is estimated at a record 192,000 tons, compared with 180,000 in 1977/78 and 172,900 in 1976/77.

Unlike many other coffee exporters, Ethiopia consumes a large portion of its coffee production.

This past season was the second straight year of rapid export expansion. Ethiopia's coffee exports jumped about 38 percent from 48,200 tons in 1976/77 to 66,300 tons in 1977/78, but the increase could not overcome the drop in value. Major factor in the reduced returns was the drastic decline in international coffee prices.

Ethiopia sells coffee to many countries. But the United States is by far the leading buyer, taking $92.3 million worth in 1977/78, followed by Yugoslavia ($36.8 million) and West Germany ($32.2 million). The People's Republic of China and eight other countries purchased quantities ranging in value from $1.4 million to $6.8 million while 16 other countries bought lesser amounts.

By value, coffee accounted for about 80 percent of Ethiopia's farm exports in 1978, with the coffee share 5 percent larger than in 1977 when total agricultural exports were greater. In fact, the trend of recent years shows a slackening in value for other agricultural exports. In 1978, hides and skins, pulses, and oilseeds comprised only 15 percent of total farm exports, compared with a 37 percent share in 1973.

While coffee earnings stalled in 1978 and other farm export revenues declined, there was an expansion of imports that ranged from food items to heavy expenditures for military equipment. Thus, Ethiopia's trade deficit widened. Foreign exchange reserves, which in early 1977 were estimated to be sufficient to cover about a year's import bill, had fallen by June 1979 to about one-third of the 1976 level. No upturn in exports is expected to halt this slide.

A couple of years earlier, the picture was much brighter. A sharp rise in coffee prices in 1976 and again in 1977—the year when coffee prices peaked—resulted in a favorable balance of payments. However, this positive trade flow was soon undermined by both Government policy and other events.

On the policy side, the Government had diverted more and more exports to Communist countries—particularly to the USSR—on barter terms, resulting in a drop in hard currency earnings and a deterioration of foreign reserves.

In its Quarterly Bulletin issued in June 1979, the Government—recognizing the stress of the times—stated that the fundamental reasons for the economy's unsatisfactory performance stem from the chain effects of the war situation. Internal and external disturbances diverted human and material resources from production activities.—*By H. Charles Treakle, Economics, Statistics, and Cooperatives Service.* □

Poland

Feed in Short Supply—Imports From U.S. Likely To Increase

Poland's livestock herds, hard hit by adverse weather during first-half 1979, at midyear were not only far short of official growth targets but were fewer in number than on July 1, 1978. Because of harvest shortfalls, prospects for increasing U.S. feed exports to Poland during 1979/80 are very good.

The decline in cattle, hog, and sheep numbers coincided with official exhortations to expand herds—cattle by 2.2 percent, hogs by 0.5 percent, and sheep by 3.6 percent.

Reversing the growth trend that all livestock categories had shown in 1977 and 1978, cattle numbers on July 1, 1979, were 13,036,000 compared with the official plan of 13,400,000 and the year-earlier total of 13,115,000. Cow numbers were 6,050,000, compared with the planned 6,100,000 and the 1978 total of 6,082,000.

Hogs at 21,214,000 were substantially below the planned 21,800,000 and the 21,717,000 year-earlier total, while sheep, at 4,221,000 head, were below the 4,400,000-head flock called for in the official plan and the 4,248,000 reported on July 1, 1978.

Conditions for raising livestock in Poland during 1978 were relatively good, and production returns improved—temporarily. Prices paid to producers during the second half of the year rose 16.8 percent for cattle, 8.8 percent for hogs, and approximately 10 percent for milk.

A combination of average grain and potato crops and continued large grain imports assured adequate fall feed supplies, despite a poor 1978 forage harvest. Livestock inventories on January 1, 1979, showed strong gains over year-earlier totals.

However, weather conditions deteriorated dramatically in January. Continued extremely harsh weather during the first 3 months caused disruption of feed supplied to farms and of produce supplies to markets. The same rigorous conditions caused higher-than-normal livestock death losses.

The late 1979 spring forced farmers to delay the pasturing of animals by several weeks, and drought through June cut substantially into yields of grasses. The net result for the 12-month period ending June 30 was smaller herds in every major livestock category.

Although it is too early to evaluate livestock performance for second-half 1979, there is no evidence that Poland's livestock sector has sustained as severe a setback as that experienced in 1976, when the cattle herd declined 6 percent and hog numbers plunged 22.5 percent. It is more likely that the livestock sector will continue the sluggish performance of first-half 1979 through the 1979/80 winter months.

The sharp reduction in Poland's animal numbers during 1976 was exclusively on private farms. Herds on socialized farms continued to expand during this period.

The decline this time has been in both the private and socialized sectors, with the drop in hog numbers on socialized farms (3.5 percent) almost twice as extensive as on private farms.

The large drop in hogs on socialized farms is of particular importance because these farms depend heavily on concentrated feed for livestock, and most of Poland's imported feedgrains are channeled to these farms.

Reductions in cattle and sheep numbers have been confined mainly to private farms.

On a live-weight basis, State purchases of cattle in the first 6 months of 1979 were up 7.3 percent from the year-earlier level, while purchases of calves were up 12.6 percent and hogs up 4.7 percent. Milk purchases, on the other hand, were more than 5 percent below activity in the comparable 1978 period.

Higher slaughter rates recently presage lower production of meat and other livestock products until herds are rebuilt. Data on State purchases—although an incomplete measure of livestock slaughter, as not all privately owned livestock are sold through State channels—will help identify the directions of livestock inventories in the coming months.

Another indicator of the dynamics of the Polish livestock sector is the pattern of State sales of concentrated feed to farms.

The normal pattern is for monthly sales to decline during the spring and summer and to pick up during the fall and winter. Monthly sales during January-June 1979, although following this general pattern, were the lowest for any comparable period in the past 6 years.

State sales of concentrated feed in the coming months should provide a clue as to whether the Government has been able to persuade farmers to end the decline in livestock inventories.

Poor growing conditions last year reduced Poland's domestic feed production. Preliminary crop reports indicate that the 1979 grain production declined 15 percent or more below 1978 levels and more than 20 percent below the record harvests of 1974.

Poland's production of rapeseed—the country's major oilseed—is estimated at less than 40 percent of 1978's mediocre crop.

The United States is Poland's largest supplier of feedgrains and a major supplier of oilseeds and meals. Poland's total 1979 grain import needs—based on statements by Polish officials and U.S. estimates—are for 7-8 million tons, about 1 million tons more than estimated 1978/79 imports.

Developments in the Polish livestock sector seem to indicate that grain and oilseed imports probably will not be expanded to the full extent of the projected harvest shortfalls.

Large foreign debts, the possibility of higher world feed prices, and pressure to reduce the hard-currency trade deficit imply that Poland will be reluctant to make up all domestic feed shortages through imports.

Instead, it appears likely that animal numbers will be reduced to narrow the gap between domestic feed production and consumption needs. The size of this gap and its effect on U.S. exports of feed materials to Poland are questions that suggest careful monitoring.—*By Allen A. Terhaar; Economics, Statistics, and Cooperatives Service.* □

TRADE BRIEFS

U.S. Wines Sparkle At International Competition in Paris

Results of the recent international wine competition in Paris demonstrate that the United States is one of the world's foremost producers of premium quality wines . . . the competition featured 330 wines, including 81 French and 37 American wines, from 33 countries . . . these wines were judged by 62 experts—including 27 French and 3 American—from 10 countries . . . the United States was the leader for major white wines, capturing first place in the Chardonnay, Sauvignon, and German-style Riesling categories; France was the winner in red wines by taking six firsts . . . for events in which both U.S. and French wines were entered, percentages of U.S. and French wines in the top five placings were: whites, U.S. 47 percent—France 43 percent; reds, U.S. 53 percent—France 36 percent; overall, U.S. 50 percent—France 40 percent.

Canada Opens Two Dairy Facilities in Effort To Boost Exports

Two major dairy facilities, geared specifically to boost Canada's export sales, opened recently in Quebec . . . one is a plant that can process three million cases of evaporated milk per year, requiring about 300 million pounds of raw milk; the other is a large storage facility with a capacity of 500,000 cases of milk . . . the Canadian Government has launched a program to encourage export sales of evaporated milk, whole milk powder, and cheese to markets other than the United States and the European Community.

U.S. Food Fair Is a Hit At Sapporo; Show at Fukuoka in February

The 1979 American Food Fair held recently in Sapporo, Japan, attracted 765 registered buyers and resulted in floor sales of $84,200 as well as generating $1.9 million in projected sales over the next 12 months . . . some 130 new-to-market products were introduced at the show . . . substantial orders were received for U.S processed potatoes and onions although both potatoes and onions are grown in Hokkaido—the northern island having Sapporo as its largest city . . . the 2-day show sparked requests that the event be made an annual affair and set the stage for a similar show to be held in Fukuoka—on Japan's southern tip—February 27-28.

W. Germany's Pet Food Boom Drawing Interest Of U.S. Suppliers

U.S. suppliers of manufactured products and raw materials are closely watching the development of the fast-growing West German pet food market—a sector that is responding to rapid increases in pet populations in West Germany . . . according to German industry estimates, consumers there spent about DM2.9 billion in 1978 to feed pets . . . these expenditures included DM2.21 billion for dog food and about DM571 million for cat food . . . of the leading German manufacturers in that market, at least four are subsidiaries of U.S. firms . . . one U.S. affiliate has an overall market share of about 70 percent while another boasts a 10 percent share . . . another U.S.-German company that concentrates on cat foods has more than 50 percent of the market for dry cat food.

EC's NFDM Stocks Fall Sharply

The European Community's stocks of nonfat dry milk (NFDM) have fallen sharply and were expected to total about 289,000 metric tons by the end of 1979, compared with 704,000 tons held at the end of 1978 . . . the dramatic reduction of NFDM stocks in recent months is attributed to highly subsidized exports and to extensive domestic subsidies within the EC for feeding of NFDM to hogs and poultry . . . because of the rapid drawdown the EC suspended on October 22 the subsidies that encouraged the use of NFSM as hog and poultry feed and reduced the subsidies on exports.

GPW-WWA Merger Scheduled for January, 1980

The consolidation of Great Plains Wheat (GPW) and Western Wheat Associates (WWA) into a new foreign market development organization—U.S. Wheat Associates, Inc.—is scheduled to take place January 11, 1980, according to Michael L. Hall, president, Great Plains Wheat, Inc., . . . he stated the merger will result in a much stronger U.S. wheat farmer and Government-funding foundation for foreign market development and will provide the opportunity for an effective integration of a worldwide marketing and promotional program for U.S. wheat.

Taiwan Rice Stocks Rise, Despite Increased Exports

In the past few months, Taiwan's exports of surplus rice have risen sharply, with the major recipients being Indonesia, Mozambique, and Singapore . . . total exports for calendar 1979 are estimated at 300,000 tons, compared with 328,000 tons exported in 1978 . . . in addition, approximately 100,000 tons have been contracted for export to Indonesia for delivery in 1980 . . . C. F. Huang, director of the Taiwan Food Bureau, said bumper harvest of the past few years have resulted in more than 900,000 tons in storage, far above Taiwan's rice requirements . . . Taiwan has lowered its rice target this year to 2.12 million tons (milled basis) from 2.4 million.

$1 Million CCC Credit For Sales of U.S. Dairy Breeding Cattle to Italy

Secretary of Agriculture Bob Bergland recently announced that $1 million has been authorized to finance sales of U.S. dairy breeding cattle to Italy under the Commodity Credit Corporation export credit sales program . . . Bergland said the credit would be for 3 years, and deliveries must be completed by August 31, 1980 . . . U.S. exports of dairy breeding cattle to Italy totaled 541 head worth $1,089,040 during January-October 1979, compared with 91 head valued at $223,200 during the same 1978 period.

American Food Menu Promotion 'Held Over' At Hong Kong Hotel

Because of the excellent response from the public, a U.S. food menu promotion, originally scheduled to run November 12-24, was held over an additional 2 weeks by a Hong Kong hotel . . . sponsored by FAS and the Poultry and Egg Institute of America, the promotion was entitled "Harvest-Time America" and featured such items as U.S. poultry and egg products, U.S. beef, fruits and vegetables, and American wines.

Venezuela Cuts Tariffs To Combat Rising Prices

Concerned over rising retail prices, the Venezuelan Government has reduced tariffs on approximately 200 categories of processed and unprocessed agricultural products, such as canned fruit and fruit juices, sugar, butter, cheese, hams, processed grain products, bakery products, vegetable oils, ketchup, mayonnaise, and soups . . . the recent action is in line with the Government policy to expose domestic suppliers of consumer products to more competition from abroad in order to achieve fairer prices for consumers.

WORLD AGRICULTURAL DAYBOOK

January

Trade/Technical Team Trips

U.S. Teams Overseas

Date	Team	To
28-29	FAS-sponsored sales team	San Jose, Costa Rica
31-Feb. 1	FAS-sponsored sales team	Panama City, Panama

Foreign Teams in the U.S.

Date	Team	To
5-23	Japanese feed manufacturers	California, Kansas, Illinois
In Jan.	Japanese poultry and egg team	Illinois, Louisiana, Washington, D.C.

Trade Exhibit

Date	Event	Location
23-26	Southeastern International Poultry & Egg Exhibition and Convention	Atlanta, Ga.

Trade Legislation

Date	Development
3	President's Special Trade Representative reports to the U.S. Congress on Generalized System of Preferences (GSP).

Meetings

Date	Organization and location
In Jan.	U.S.-China Commission to review science/technology exchange, Beijing.
In Jan.	International Fund for Agricultural Development, Rome.
Jan.-Feb.	U.S.-Andean Pact economic talks, Washington, D.C.
7-15	U.S.-USSR Agricultural Agreement meetings, Moscow.
9-10	American Farm Bureau Federation annual meeting (incl. export outlook), Phoenix, Ariz.
9-11	National Turkey Federation annual meeting, Las Vegas, Nev.
14-15	OECD Committee for Agriculture, Paris
14-18	U.S. Agricultural Attaches for East and South Asia, and Pacific, Manila
15	Agribusiness Export Seminar, Spokane, Wash.
15-19	American Seed Trade Assn. (incl. market development), St. Louis, Mo.
17	Agribusiness Export Seminar, Columbus, Ohio
17-21	Natl. Wool Growers Assn. (incl. outlook for wool and sheep), San Diego, Calif.
28-29	National Cotton Council annual meeting (incl. trade in cotton and cotton products), New Orleans, La.

South Africa's Cotton Output, Exports Up

South Africa's cotton production and trade are trending up, and there is considerable optimism among producers because of an improved Government pricing scheme and several new irrigation projects.

Production during 1979/80 (August-July) is forecast at 54,446 metric tons (250,000 480-lb. bales), compared with an estimated 51,833 tons (238,000 bales) in 1978/79.

Exports during 1979/80 are forecast about 8,700 tons (40,000 bales) compared with 4,356 tons (20,000 bales) in 1978/79.

New irrigation projects—such as the Orange River scheme in the Eastern Cape, and new dams in the Eastern Transvaal—should bring more land into cotton production. Cotton is by far the most profitable crop that can be grown in the East and North Cape areas.

Domestic consumption of raw cotton is expected to increase 12 percent during the 1978/79 marketing year, reaching 53,793 tons (247,000 480-lb. bales), compared with 48,131 tons (221,000 bales) consumed in 1977/78.

South Africa's textile industry supplies about 80 percent of the country's textile needs, with imports making up the rest. As recently as 1974, the industry supplied about 56 percent, and imports the remainder.

Manmade fibers have cut into the cotton share of the domestic market. However, after 4 years of decline, cotton consumption increased in 1977/78 and in 1978/79. Rising petroleum prices have given cotton a price advantage over domestically produced manmade fibers. *By Samuel D. Smith, Tobacco and Cotton Division, Commodity Programs, FAS.*

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OECD Ministers Meet in March, Will Focus On 1980's

The Committee for Agriculture of the Organization for Economic Cooperation and Development will meet at ministerial level March 5-6, 1980, at OECD headquarters in Paris. The ministers will focus on the outlook for improved functioning of agricultural markets and the development of food and farm policies.

The last meeting of OECD agricultural ministers in February 1978 provided renewed focus and direction to the work of the OECD Committee for Agriculture. For example, market outlook activity is expanding to include significant events and trends in developing countries and in centrally planned economies. The annual agricultural policy review is now incorporating highlights on agriculture policy changes in nonmember countries.

OECD is identifying and analyzing policy issues facing the food economies of its members in the upcoming decade. New emphasis is being placed on the impact of the growing and changing relationships between developing and centrally planned economy countries and OECD members.

The OECD Ministerial Council in June 1978 agreed upon the need for development of positive adjustment policies across all major sectors of member countries' economies. The specific concern with agriculture, as pointed out in the conference communique, was that agricultural adjustment policies be "designed to achieve their social, economic, and political objectives at minimum cost to the consumer and taxpayer without neglecting the legitimate interests of agricultural producers and while ensuring the necessary overall food security."

The Agriculture Directorate began to develop a framework for discussions of positive adjustment policies for agriculture by the Committee for Agriculture, composed of delegates from the 24 member countries. These deliberations began in October 1978 and continued at meetings of the Committee and the working party on Agriculture Policies.

Results were twofold: The agricultural portion of the report on positive adjustment policies to the economic ministers in June 1979, and identification of specific adjustment policy issues to be studied by the subsidiary bodies of the Committee during the remainder of 1979 and during 1980.

The economic ministers continued to emphasize positive adjustment policies for noninflationary growth at the June 1979 meeting. They also sanctioned the establishment of a special high-level group as an adjunct of the Economic Policies Committee to coordinate, interrelate, and draw policy conclusions from the work of the specialized bodies of the Organization, including agriculture.

Thus, the Committee for Agriculture will continue its work on adjustment policies with an analysis of the socio-economic impacts and external effects of various agricultural income support measures. The Committee's report to the June 1979 ministerial meeting stated several principles to "assist governments in the formulation of policies to facilitate economically desirable and socially beneficial change in agriculture." These principles, which will be useful in focusing the conclusions of the income support study, include the need for:

- A long term and global perspective;
- Adjustment to include both efficiency and equity objectives;
- Consistent sets of macro and micro policies;
- General measures to be given preference over selective measures; and
- Cost-effectiveness and transparency in the use of adjustment policy instruments.

In addition to the emphasis on adjustment policies, the economic ministers—at the suggestion of the Prime Minister of New Zealand—agreed that agricultural trade problems should be studied to pinpoint ways to increase agricultural trade flows among OECD countries. This study will join another one—suggested by the agricultural ministers—on trade relations between OECD members and the developing world.

Preliminary work on these activities, along with ongoing work on food and agricultural policies and market outlook, will provide the basis for background materials for the agricultural ministers' meeting in March. The meeting is expected to be of long-range benefit to the United States and other OECD members as well as to nonmember countries—*By George E. Rossmiller, former U.S. Agricultural Attaché, OECD/Paris.*